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CENSUS OF INDIA, 1901.

VOLUME XII.

BURMA.

PART I.

REPORT.

BY

C. C. LOWIS,

OF THE INDIAN CIVIL SERVICE,

SUPERINTENDENT, CENSUS OPERATIONS.

RANGOON:

OFFICE OF THE SUPERINTENDENT OF GOVERNMENT PRINTING, BURMA.

1902.

Price, Rs. 3-8-0 = 5s.

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PREFACE.

I FIND it impossible to place adequately on record my acknowledgments to those who have laboured with me in the preparation of this Report. To review the proofs as a connected whole is to realize, to an overwhelming degree, how much I am beholden to others and to take the measure of my indebtedness is to be seized with an uneasy sense of the hopelessness of attempting to compound, even to the scantiest extent, with all of my many creditors. I must leave it to the pages of the Report itself to bear grateful testimony to my obligations. A glance at the language chapter will tell how shadowy a production it would have been without the benefit of Dr. Grierson's erudition. Every paragraph of the caste, tribe and race chapter will show with how lavish a hand I have drawn upon Sir George Scott for my material. I would, however, take this opportunity of specially thanking Dr. Cushing and Mr. Taw Sein Kho, who have responded more than generously to my appeals for assistance and advice. The greater part of the Report has been shown to Mr. Eales, and it is to his ripe experience that I am indebted for hints which have led me to alter portions. To Mr. Regan, Superintendent of Government Printing, my thanks are due for having, in the face of sudden and quite exceptional difficulties, succeeded in passing this volume through the Press without undue delay.

In my own office the services of Mr. J. F. Stevens and of Babu K. M. Basu call for special mention. Mr. Stevens has been my right-hand man almost from the very commencement of the operations, and his industry and intelligence have throughout merited the very highest praise. Babu Basu has worked well and steadily as head compiler, and I am glad to see that his services have already received in another department the recognition they deserve.

In view of the emphasis that has been laid of late on the importance of curtailing official reports, I have endeavoured to make this volume as brief as circumstances permitted. My one regret is that time did not allow of an even more rigorous compression.

RANGOON :
The 29th July 1902.

C. C. LOWIS.

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REPORT

ON THE

CENSUS OF BURMA.

Taken on the 1st March 1901.

INTRODUCTION.

THE Census of 1901 was taken on the night of the 1st March (in Burmese chronology, the 13th waxing of the month of *Ta-baung* in the year 1262), but preliminary arrangements occupied the whole of the twelve months preceding that date. In fact the ground was broken towards the end of 1899, and by the 1st March 1900 matters had begun to be put in train. It is this latter date, exactly a year before the night of the final enumeration, that I would select as a starting point for my review. During the preceding few months the Local Government had been in communication, on the one hand, with the Government of India and, on the other, with the Superintendents of the Northern and Southern Shan States and the Chin Hills, regarding various points connected with the Census, with special reference to the inclusion within the scope of the operations of the political charges that had not been directly dealt with in 1891. Matters cannot, however, be said to have by the 1st March progressed much beyond the deliberative stage. Though for a brief period I had been on special duty in connection with the Census, my appointment as Superintendent had not been formally notified and no definite orders on any of the points under discussion had as yet been issued from the Secretariat. The beginning of March coincided with the close of the Census Commissioner's first visit to the province. Mr. Risley had just returned from Upper Burma, where he had had the opportunity of conferring with Mr. Eales, the Superintendent of the last Provincial Census, and of ascertaining his matured views on all debatable matters. The Superintendent of the Government Press had been consulted in regard to the important question of the printing of forms; the Secretary of the Municipality had at an interview described the special difficulties that experience showed would have to be encountered in Rangoon. By the end of February everything was ready for a pronouncement by the Local Government on the policy to be adopted.

The initial stages.

2. It was on the 1st March 1900 that what may be looked upon as the first of the formal documents connected with the 1901 Census in Burma issued from the Government Press. It was a note prepared by Mr. Risley on a number of points which he proposed to discuss with the provincial authorities before leaving for Madras, and it formed the basis of a discussion which took place on the following day at Government House, Rangoon. There were present on this occasion His Honour the Lieutenant-Governor, the Census Commissioner, the Revenue Secretary to the Government of Burma, and myself. The various points raised in the note were gone into *seriatim*, doubtful questions were discussed and settled, and a rough provisional division of the area of the province into synchronous, non-synchronous, and "estimated" tracts was decided upon. The shape in which the arrangements for the two latter classes eventually emerged is detailed in the following paragraphs.

Preliminary discussion with the Local Government.

3. As regards synchronous areas, the outcome of the deliberations then undertaken took the form of a letter (No. 112-3C.—1, dated the 6th April 1900) from the Revenue Secretary

The General village register.

to Government to all Deputy Commissioners, which is printed among the appendices to this report. This letter dealt with the initiation of preliminary operations, gave general instructions as to the division of the area of the province into well-ascertained Census units, defined the expressions "Charge," "Circle," "Block," "Charge Superintendent," "Supervisor," "Enumerator," and the like, laid down what classes of the community were ordinarily to be selected as Census officers, communicated orders regarding non-synchronous areas, and finally prescribed, as a first step towards the end to be attained, the preparation of a District Census register, which came to be known later as the "General village" (or Town) register." The form of this register was new to Burma. It corresponded more or less with the "Subdivisional register" prescribed at the 1891 Census; but, whereas the Subdivisional register showed at a comparatively late stage of the operations the steps that had actually been taken to divide the different districts up into Census divisions and to select from their inhabitants individuals for appointment as Census officers, the General village register (or, as for some time it was called, Appendix A) was intended to exhibit, at the very outset, and in a purely provisional form (to be subsequently revised and brought up to date), the Deputy Commissioner's proposals for these arrangements. The details of the information given were, however, practically identical in both cases. The main feature of both was an exhaustive list of Census blocks and circles, either created or proposed, for each township and subdivision, with a rough estimate of the number of houses in each Census division and from both it was possible to obtain, so to speak, a bird's eye view of the Census arrangements completed or contemplated, as the case might be, for each district. The following extract from Chapter II of the Provincial Census Code, referred to in a later paragraph, shows generally the purposes the register was intended to serve :—

"The basis of all Census operations in rural areas is the statement or register showing the villages actually in existence in each district. Without such a register, carefully corrected up to date, entire villages may be omitted from the Census operations; the same village or parts of it may be included in two circles or charges, and great confusion may arise on the borders of districts and minor administrative divisions. In order to make a good scheme of Census divisions for a district, it is essential to know (*a*) the number and names of the villages in the district, (*b*) the number and names of the hamlets, (*c*) the number of houses in each village or hamlet, and (*d*) the number of persons in each village or hamlet who are fit to be appointed as Supervisors or Enumerators, as the case may be. Given these particulars, it is easy, with the aid of a map, to group villages in Supervisors' circles and to determine provisionally the number of blocks in each village. The arrangement thus made may require to be modified later on when the houses are numbered and the house lists written up, but meanwhile it will show how many schedules will be required for each village and how many notices of appointment will have to be issued to Supervisors and Enumerators. It will also indicate in what areas there is likely to be difficulty in procuring a competent agency locally."

The preparation of a record of this nature was naturally expected to be a task of some magnitude, and, as there was no prospect of any of the registers being ready much before the beginning of June, I was allowed by the Local Government to proceed on three months' leave immediately after the conference referred to in the preceding paragraph.

Areas not dealt with synchronously.

4. Before passing on to the later stages of the work, namely, those entered upon after the 1st June, it may be as well for me to advert here to the arrangements made for dealing with those portions of the Province which lay outside the sphere of the regular synchronous operations. Their treatment, the outlines of which were settled at the conference referred to above, was more a matter of general policy than of detail and can therefore be more suitably dealt with in this volume than in the Administrative Volume, which is primarily devoted to the record of formal routine. The tracts where the backwardness of the indigenous tribes called for special treatment at the Census are probably more extensive in Burma than in any other province of the Empire. The popular idea that Burma is a succession of pestilential paddy swamps inhabited by amphibious husbandmen is almost a thing of the past, and even outside the province it is now generally known that, save in the delta, which for the last century has coloured all the popular conceptions of the country, hill and valley in Burma alternate like ridge and

furrow on a newly-tilled field. All the highland through which the great rivers of the country, the Irrawaddy, the Chindwin, and the Salween, have forced their way south is the home of separate congeries of timorous, irrational hill-folk, dotted sparsely along the crests, or precariously cultivating the jungle-clad slopes, intolerant of interference, unlettered, undisciplined, bound together by no ties of tradition, or community of speech—Chin, Kachin, Karen, Palaung; their name is legion. One and all they needed careful handling in a matter which, do what one would, was almost always connected in their minds with dark fiscal designs.

A threefold classification.

5. There were, however, degrees of backwardness among these hill dwellers, and an attempt was made to vary the methods of enumeration, according as this or the other stage of civilization had been attained. In Burma, as elsewhere, a threefold classification of special tracts was adopted. First in order came the ordinary non-synchronous areas, where the inhabitants were wild, widely scattered and illiterate, but where the conditions were such that, by extending the operations over a longer period than usual, by dispensing with a final check, and by importing a specially trained agency for enumeration, it was believed that results could be obtained as full and very nearly as reliable as those secured in the synchronous areas. Next came the "estimated" tracts, those so backward that even the modified procedure just described seemed likely to fail of its object. In these it was decided to make no regular enumeration, but merely, in the first place, to count the number of inhabited houses, next to ascertain the average number of persons per inhabited house by carefully enumerating a certain number of typical villages, and then, by applying this average to the total obtained by the first process, to calculate the population of the entire area. Lastly, there were the still more savage regions, in which political or other considerations urged the expediency of a total abstention from interference even as slight as would be involved in a rough calculation of the kind described. Such were the localities inhabited by the wild Was, the head-hunters, whose awkward failings have been so graphically described by Sir George Scott in his *Gazetteer of Upper Burma*, and whose susceptibilities have still to be considered. They were known as the "omitted" tracts and were left altogether outside the scope of the operations. In which of these categories each portion of the non-synchronous area of the province was included can best be gathered from the maps showing synchronous and non-synchronous areas which are annexed to this chapter of the Report.

Treatment of the Shan States and the Chin Hills.

6. In these maps the "special" areas that bulk largest are naturally those lying outside the limits of Burma proper, such as the Shan States and the Chin Hills. For some time prior to my taking up the duties of Superintendent, the Local Government had been in correspondence with the Superintendents of the Northern and Southern Shan States and of the Chin Hills with regard to the procedure to be adopted in the enumeration of their charges, and by the date of the informal conference held on the 2nd March all three of these officers had had time to come to the conclusion that a synchronous Census would be out of the question, and to inform the Lieutenant-Governor accordingly. In the Shan States the authorities deemed a non-synchronous Census possible in portions of the whole area, the Superintendent of the Southern Shan States being desirous that it should be combined with the annual collection of revenue statistics required for the preparation of the *Sawbwa's* budgets. In the Chin Hills the Superintendent advised on various grounds against operations of any kind. The discussion of the 2nd March afforded the Local Government an opportunity of considering these replies in consultation with the Census Commissioner and of passing orders on them. The matter was not finally disposed of until several further communications had passed, but by August a Census scheme for all three charges had been sketched out. The objections of the Chin Hills Superintendent were overruled, a non-synchronous Census of the tract was decided upon, and immediately it was definitely settled that operations were to be undertaken, the local authorities threw themselves heart and soul into the preliminary work. The proposed combination of the Census with the collection of revenue data in the Southern Shan States was considered and objected to on the ground that the latter operations had to be conducted during

the rainy season at a period of the year far too early for the requirements of the Census. There are obvious advantages in being able to kill two birds with one stone, but this economy in missiles is profitless if (to pursue the metaphor) one of the birds goes bad before it can be brought to table. On this and on other grounds (one of which was the expediency of dissociating the Census as far as possible in the minds of the people from revenue collection) the Local Government resolved to keep the two operations separate. Mr. Hildebrand, the Superintendent, abandoned his idea with reluctance, but when once it was clear that the orders on this point could not be reconsidered, he prepared and submitted a carefully-thought out scheme for carrying the work on the lines suggested by the Local Government, showing, as Messrs. Drury and Fowler had shown at Falam, that he was determined, whatever his personal views were, to carry the policy adopted by the Local Government loyally through. In the end it was decided that the greater portion of the Northern and Southern Shan States and the whole of the Chin Hills, except the portion adjoining the Pakôkku district which is administered by a separate Assistant Superintendent, should be treated as non-synchronous tracts and be enumerated on the standard form of schedule during the cold weather of 1900-01. The areas to be "estimated" were Karenni in the Southern Shan States, the Pakôkku Chin Hills, and what are known as the Kachin districts of the Northern Shan States. Only a portion of the above areas had come within the scope of the previous Census. The Chin Hills had on the last occasion been wholly untouched, and in the Shan States all that had been attempted was a rough count which, though fuller than that obtained by the 1901 "estimating" system, was not by many degrees as ample as the non-synchronous Census on the standard schedule. This very substantial extension of the area in which it was deemed possible to carry out a detailed enumeration is in itself significant proof of the progress made during the past decade in re-assuring and elevating the more timid and ignorant of His Majesty's subjects in the Province. The only wholly "omitted" areas were the trans-Salween States of the Northern Shan States and West Mang Lön, which is a cis-Salween State, but more than ordinarily backward and rugged.*

Non-synchronous arrangements for the districts of Burma proper.

7. The matter of the non-synchronous enumeration of the less civilized portions of Burma proper was not finally settled till some time after the arrangements for the Shan States and the Chin Hills had been finally completed. The only district the whole of which was thus specially dealt with was Northern Arakan. In 1891 this charge was non-synchronously censused, and, on discussing the matter with the Deputy Commissioner, Paletwa, in October 1900, I found that, though it might be possible to apply the final check throughout the district rapidly, the operation would not be sufficiently rapid to allow its being compressed into the few hours required by the Code. I accordingly recommended that it should again be treated as a non-synchronous area. Of the following districts, portions only came within the non-synchronous category:—

Akyab.	Amherst.	Mergui.	Katha.
Kyaukpyu.	Thatôn.	Bhamo.	Ruby Mines.
Pegu.	Tavoy.	Myitkyina.	Upper Chindwin.

In Akyab, Kyaukpyu, Pegu and Thatôn the non-synchronous areas were insignificant in extent. In Tavoy and Amherst, too, the non-synchronous area was a small proportion only of the total area of the district. In Mergui it was proportionately rather larger. On the occasion of the 1891 Census the whole of what is now the Amherst district was dealt with synchronously and in Mergui the non-synchronous area was shown as smaller than at the recent Census. It appears, however, that, as a matter of fact, the enumeration in parts of the so-called synchronous areas of these two districts was synchronous in name only, and it was accordingly decided, rather than run the risk of having unreliable figures through trying to do too much, to take what would at first sight appear to be a retrograde step and classify as non-synchronous portions of the wilder tracts of Amherst and Mergui inhabited by Karens and Siamese which in 1891 had figured as synchronous.

* At page 308 of Volume I of the first part of the *Upper Burma Gazetteer*, West Mang Lön is described as being, in 1891, the only State west of the Salween which had not accepted British authority.

In Pegu a small forest reserve area that had in 1891 been included in the regular operations was dealt with non-synchronously, but these were the only exceptions to the rule that every portion of the province was to be enumerated either as much in detail as at the 1891 Census or on a fuller and more thorough system. In Akyab and Kyaukpyu the non-synchronous areas were some remote stretches of highland inhabited by semi-savage Chin communities. In the Tenasserim division the tribes dealt with non-synchronously were Karens, Taungthus, Siamese and Selungs. These had, with the exceptions mentioned above, all been treated at the last Census on a non-synchronous footing. The whole of the non-synchronous area in Lower Burma was much the same as it had been ten years before. In Upper Burma the changes were more marked. In 1891 the greater part of the present districts of Myitkyina and Bhamo were still far too unsettled to allow of anything save the most rough and ready numbering of the people. At the recent Census, on the other hand, the District Officers were able to enumerate portions of their charges synchronously and to deal non-synchronously with a good deal of the balance, leaving only the remotest of the Kachin hill ranges to be "estimated." The greater part of Katha and the Upper Chindwin, where a large section of the population was in 1891 excluded from the operations, was numbered synchronously and nearly the whole of the rest non-synchronously, and the State of Möng Mit, which a decade ago was an excluded tract, has now, apart from the final five-hour check, been almost as exhaustively enumerated as Rangoon city. The only estimated area in Upper Burma proper was the wilder portion of the Kachin region in the Upper Chindwin, Bhamo and Myitkyina districts. No part of the regularly administered province was wholly omitted from the operations.

Preparatory measures.

8. I returned from leave at the end of May and on the 1st June assumed charge of my duties in Rangoon. The whole of the succeeding nine months was fully occupied in settling the further preliminaries for the Census. During this period I visited each of the districts in Burma save one (Salween), and discussed with each District Officer the arrangements to be made for his charge, and, as each fresh stage of the operations approached, drew attention to it by circular or otherwise and issued the instructions required for the guidance of the Census officers who were to carry it through. These various stages and the procedure they involved are described in some detail in the Administrative Volume of the Census Report, of which a limited number of copies is being circulated to selected Government officers for reference. It has not been thought necessary to offer, in this volume of the report, so minute a presentment of routine and procedure as is required in the Administrative Volume, but all the main features of that Volume are sketched in the following paragraphs.

Code of Census procedure.

9. One of the Superintendent's earliest tasks was the compilation of a manual for the guidance of officers concerned with the Census. With a view to uniformity in general treatment, the main lines of the procedure to be followed before, at, and after the final enumeration of the 1st March were embodied by the Census Commissioner in a publication known as the Imperial Code of Census Procedure. Each Provincial Superintendent took the Imperial Code as his model, reproduced literally so much of it as applied, unaltered, to his Province, introduced into the rest such modifications as local conditions demanded, and published the result as his Provincial Code of Census Procedure. The Code was issued in instalments, each chapter being distributed with a covering circular to the officers concerned shortly before the stage with which it dealt had been reached. Chapters I and II contained definitions and practically repeated the instructions regarding the preparation of the Village Register that had been contained in the Revenue Secretary's letter of the 6th April. For the first month or two after my return from leave my principal duty when on tour was to examine the District Village Registers and ascertain and criticize the arrangements they embodied.

Definitions.

10. It may be as well here to refer to a few of the principal definitions in the Code. The expressions "Charge Superintendent," "Supervisor," and "Enumerator," "Charge," "Circle" and "Block" had almost precisely the meaning attached to them at the 1891

Census. The charge was ordinarily a township and was controlled by the Charge Superintendent, the highest grade of Census Officer formally appointed under the Act (X of 1900), who was as a rule either a Township Officer or an Inspector of Land Records. Each charge consisted of a number of circles, for each of which a Supervisor was responsible. Clerks, revenue surveyors, thugyis and the more intelligent of the rural officials were usually selected for the control of circles. The size of circles varied considerably, but their area was never greater than what an active Supervisor could cover easily, with stoppages for inspection, within a week or ten days. Each circle was composed of so many blocks (from 10 to 15 ordinarily) in charge of an Enumerator, with whom the actual duty of recording the population in the schedules rested. The Enumerator was ordinarily a thugyi, a village headman, a ten-house gaung, or some other rural official. Where suitable officials were not available for the work non-officials were selected. With a few rare exceptions, there were never more than 50 houses in a block; there was practically no minimum. Each block was enumerated in a separate enumeration book. For the purposes of the Census a house was defined as a building to which a separate number had been affixed for Census purposes. This left a wide discretion to local Census Officers. A village was in the Code a village as defined in the Village Act and Regulation. Certain difficulties which arose in connection with the use of this term are described in the Administrative Volume. At the next Census I would advise that the artificial village area be ignored and the hamlet taken as the initial unit. A Census town was either a municipality, a cantonment, a town as defined in the Towns Act or Regulation, or any other collection of houses with 5,000 or more permanent inhabitants that it was decided to look upon as possessing real urban characteristics. A total of fifty such urban areas were treated as towns for the purposes of the Census. There were two cities (*i.e.*, towns of not less than 100,000 inhabitants)—Rangoon and Mandalay. A special register for towns was prescribed in Chapter III of the Code. By the end of the rains the Village and Town registers had been practically completed and abstracts had been sent me, with maps of the areas concerned.

Circle lists, house-numbering, house-lists, &c.

11. Towards the end of August orders were issued, in the shape of an addendum to Chapter II of the Census Code, directing the preparation of circle lists and circle maps for the use of Supervisors at the Census. The circle list was a synopsis of the Census arrangements made for the circle, serving for the smaller area much the same purpose as the General Village Register served for the district. The map supplemented the knowledge conveyed to the Supervisor by the circle list. Lists and maps were prepared in the district office and distributed thence to Supervisors. Their preparation was a long and troublesome task, but they had for the most part been issued to Supervisors soon after the business of house-numbering had been taken in hand. This latter stage of the operations was reached about October or November and occupied Supervisors and Enumerators for the better part of the rest of the year. It was dealt with in Chapter VII of the Code of Census Procedure. In the matter of house-numbering, Enumerators were guided by Supervisors and Supervisors by instructions contained in Chapter I of a small pamphlet issued in English and Burmese towards the close of September, known as the "Charge Superintendents' and Supervisors' Manual." This was the Supervisor's *vade mecum*. It was made as simple and at the same time as exhaustive as possible. The first chapter dealt with the circle list, house-numbering, the house list, and the distribution of enumeration books as looked at from the Supervisor's point of view and carried matters up to the date for the commencement of the preliminary enumeration. The house list was prepared by the Enumerator after house-numbering was finished. It was virtually a rough index to his enumeration book and, when completed, gave a list of all the households for which he was responsible. It was eventually copied by him into his enumeration book and called the block list. The preparation of the house list was dealt with in a second addendum to Chapter II of the Code of Census Procedure. Chapters IV and V of the Code contained a few points of importance relating to the translation and supply of forms. The schedules, with the covers of the enumeration books, were printed in Burmese and Shan. All other forms were, when this was necessary, translated into Burmese.

The enumeration in Cantonments, on Railways and in ports formed the subject of Chapters VIII, IX and X of the Code. The arrangements for these areas differed in no material particular from those made at the 1891 Census.

Training of Census officers. Experimental enumeration.

12. Chapter VI of the Code referred to the selection and training of the Census Agency. By the end of 1900 all Census Officers had been duly appointed under the Act (X of 1900) and had received their declarations of appointment. During the closing months of the year a large number of them were receiving a practical lesson in Census work by means of an experimental enumeration, which was held partly for the purposes of training, but mainly in order to supply a number of entries sufficient to enable my office to test thoroughly a system of abstraction by slips which it had been decided to introduce at the March enumeration. To this end 40 bound books of schedules capable of containing 100 entries each were distributed to each district to be filled up with actual entries by selected Enumerators under the eye of their Supervisors exactly as they would have been filled at the regular enumeration. By this means it was provided that a certain proportion, at any rate, of the lower grades of Census Officers in each district should have the elements of their business drilled into them. The books after being filled up were returned to this office, where they were made use of for purposes of abstraction, and later on the errors detected during abstraction, together with the names of the Enumerators responsible, were communicated to District Officers, who, in their turn, informed the Census officers concerned and took steps to see that the mistakes were not repeated at the real enumeration.

Forms and stationery.

13. The distribution of the schedules and other forms required for the Census itself began in September. The whole of the first supply was exhausted in providing for the non-synchronous enumeration of the Shan States and the Chin Hills. The paper for the second supply did not arrive from Calcutta till a good deal later than was anticipated, and consequently it was not till November that the distribution of the schedules for the synchronous areas was begun. The business of issuing the forms continued on into January and, thanks to the energy of the Press, practically all the rural areas had been furnished with their schedules by the time the preliminary enumeration was due. There was a long delay in complying with my indent for stationery, which had been despatched in September; but the Provincial supplies were eventually received in time to allow of my issuing the district supplies before the middle of January. Each Enumerator who required them received pen, ink and blotting paper, together with an enumeration book consisting of as many pages of the general schedule as he needed and a block list into which he copied the house list referred to above. The schedules and block list were stitched into a brown-paper cover, on the inside of which were printed, among other things, the Enumerator's instructions and a specimen schedule for his guidance. The duty of binding the schedules into books of the required size rested with the Supervisors. In some cases, however, this work was done in the district office. For Europeans and others desirous and capable of filling in their schedules themselves, forms known as the "Household" and the "Private" schedule were provided.

The preliminary enumeration.

14. The preliminary enumeration was started in January in rural tracts and early in February in towns. The 15th January was the date on which it was supposed to begin outside urban areas. In a few cases it was taken in hand before that date, in a good many instances a little after it, but in the majority of districts the 15th was adhered to. The duties of Enumerators at the preliminary count consisted in going round their blocks daily and recording in the columns of the schedules in their enumeration books particulars regarding the inhabitants of each of the houses in their blocks, till all the houses had been thus dealt with. In doing this they were required to follow step by step the instructions printed inside the cover of the enumeration book. For their part the duties of Supervisors at this stage were indicated in the second chapter of the Supervisor's Manual, which was distributed early in November. Briefly these duties were to watch over and control the Enumerators' work and to give Enumerators additional guidance in regard to certain specified points not dealt with in detail in the instructions printed inside the cover.

In town areas Supervisors were supplied with a few additional rules regarding the record of castes, urban occupations, and the like. All writing at the preliminary enumeration was done in black ink. Very frequently a first rough copy of the entries was made out on plain paper or on *parabaiks* and copied on to the printed form after it had been checked by the Supervisor. No real difficulty was experienced in ascertaining from the people the particulars required for entry in the schedules. With a few exceptions, the attitude of the enumerated was one of indulgent acquiescence.

Testing the preliminary record. Census holidays.

15. In the interval between the completion of the preliminary enumeration and the night of the 1st March the preliminary record, obtained in the manner described above, was checked by Supervisors, Charge Superintendents, and such other responsible officers of Government as could be spared for this duty. Roughly this period covered the last twenty days of February. The 12th and the 13th February were gazetted as Census holidays in rural areas in order to afford Government officers an opportunity of giving two whole days' undivided attention to this business of checking. Similarly, in Rangoon, on the 18th, 19th, 20th, and 21st February all Government offices were closed and the exertions of all available officers were concentrated on the work of testing. This portion of the work was done with exceptional thoroughness in Rangoon. In October 1900 a fortnightly report showing the progress made in Census work in each district was prescribed. From this I was able to obtain a general idea of the amount of testing work done by superior officers, not only in February, but also during January 1901 and the closing months of 1900.

The final enumeration.

16. On the night of the 1st March the final stage of the operations was reached. Between dusk and midnight the Enumerator went the round of his block and with pen and red ink brought his enumeration book up to date, striking out those persons already shown in his book who were not present on the occasion of his nocturnal visit and adding those who were then present but had not been shown in the preliminary record. Here, again, practically all that he required to know was printed in the shape of a few plainly worded rules inside the cover of his enumeration book. During the hours that the enumeration was going on, Charge Superintendents and Supervisors were expected to exercise as much supervision as was possible over the work of the officers under them. It is satisfactory to learn that the people were as amenable at this as at the earlier stages of the operations and put no hindrances whatever in the way of the Census officials. A good deal of extra work was thrown at the last moment on the authorities in those districts where there were pagoda festivals on the night of the Census. Here a certain amount of additional trouble was, in the nature of things, inevitable, but there is nothing to show that it was in any way added to by the deliberate action of the holiday-makers. There was no final enumeration in the non-synchronous tracts.

Preparation of the provisional totals.

17. Inside the end cover of each enumeration book was printed a form designed to show in a few parallel columns the number of houses contained in the block—and book—and the total number of males and females returned as present at the final enumeration. This form, which was known as the Enumerator's abstract, it was the Enumerator's duty to fill up on the morning of the 2nd March. The entry of the totals was accomplished in the presence of the Supervisor, whose business it was to have arranged beforehand for all his Enumerators to meet him at some convenient place in his circle, for this express purpose, as soon after the final enumeration as was practicable. After all the abstracts for the circle had been thus prepared and duly checked, the Supervisor calculated from them the total number of houses, of males and of females in his circle, and entered the result in a circle summary, which he transmitted with due expedition to his Charge Superintendent. The Charge Superintendent in his turn condensed all the circle summaries for his charge into a charge summary and despatched this as soon as possible to the district headquarters. Here the district summary was compiled from the various charge summaries and telegrams embodying its contents, that is to say, giving for the whole district (*a*) the total number of houses, (*b*) the total

number of males, (*c*) the total number of females, (*d*) the total number of persons of both sexes, were despatched forthwith to the Census Commissioner, Calcutta, and to the Superintendent, Census Operations, Rangoon. Steps had been taken several months before the final enumeration to see that no time was wasted in carrying out the procedure described, and, where delay in the compiling of the circle summaries seemed inevitable, arrangements had been made for utilizing advance copies of the summaries, based on the unrevised figures of the preliminary enumeration, and sent by Supervisors, immediately that enumeration was finished, to Charge Superintendents. These measures enabled the Deputy Commissioners of all the districts in the province except Salween to despatch their telegrams giving provisional totals to the Census Commissioner and to this office by the 11th March. The first district telegram was received from Magwe on the 4th March. The Rangoon figures were calculated soon after 8 P.M. on the 2nd. The provisional totals for the province were as follows :—

Males	5,323,910
Females	5,144,280
Total ...	10,468,190

The work of abstraction.

18. As soon as the final enumeration was completed the enumeration books for each district were sent, with district, charge and circle summaries and circle lists, to the Abstraction office in Rangoon. The first instalment was received on the 4th March, and by the end of April the books for the whole of Burma, excluding the Shan States, had been deposited in the office record-room. The Shan States schedules, which in some cases had to be copied on to the printed forms from Shan paper forms after the final enumeration, were not sent till later. After being numbered and registered in the record-room the enumeration books were made over to the office for abstraction. The system adopted for obtaining the required data from the schedules was that known as the slip system of abstraction. It is described in some detail in the Administrative Volume. Here it will suffice to say that its most distinguishing feature was the process by which each individual person enumerated was represented for abstraction purposes by two slips or pieces of paper about the size of a *carte de visite* photograph. The colour of the slips denoted the religion of the person concerned,* their shape (according as corners were or were not cut off) his or her sex and civil condition. On the slips were copied in an abbreviated form the entries made against the person in the enumeration book, some on one slip some on the other. Thus, after having been dealt with as above, the population of each block assumed the form of two bundles of slips of different shapes and colours with different particulars regarding age, occupation, birth-place, &c., noted on them. These bundles were then sorted by the Abstraction staff, now in one way now in another, according as it was desired to ascertain this or the other set of facts for the Census tables, and the result of the sorting was entered in its appropriate column in a printed form called a tabulation sheet. Altogether five processes were gone through by the Abstraction staff. In the first place, for the names of the occupations entered in the occupation columns of the schedules, numbers were substituted by a gang of clerks who formed what was known as the Occupation department. The schedules were then made over to the Posting department, where the slips were written up by a staff of posting clerks. The posters' work was next checked by the Checking department, and the schedules and slips were then passed into the Sorting and Tabulating department, where the slips were sorted for the various tables and the results entered on the tabulation sheets. The last stage of the work consisted in compiling the various tabulation sheets into the Imperial and Provincial Tables. This was the duty of the Compilation department. There can be no question that the system was an improvement on the method of abstraction adopted at the 1891 census, which has been described in paragraphs 343 to 349 of Mr. Eales' report. Mention has been made in the Administrative Volume of the strength of the various departments on various dates and the average amount of work they turned

* In Burma, the colours selected were—

Brown for Buddhists.	Yellow for Animists.
Red for Hindus.	Blue for Christians.
Green for Muhammadans.	White for Others.

out. I would here only mention that when at their full strength the Posting and Tabulating departments numbered 274 and 187 clerks respectively, and that, while occupation writing was going on, a staff of thirty occupation writers was employed. The Checking department ordinarily numbered about the same as the Occupation department. The normal strength of the Compilation department was seventeen. All the departments were not, however, at their full strength at the same time. The maximum attendance never exceeded 570. Experience showed that an industrious poster had no difficulty in writing up the slips for 450 persons (*i.e.*, 900 slips) in an ordinary working day of seven hours (10 A.M. to 5 P.M.). An outturn of over 720 slips meant extra pay, and a large number of energetic men earned additional remuneration by exceeding this minimum, but the average for good and bad workers combined was between five and six hundred slips a day only, and with Burman posters this average is not likely to be largely exceeded hereafter. It took some little time to teach the tabulators their work, but, when once they had mastered the system, the men were able on an average to sort the slips for 1,500 persons a day, and I have taken this outturn as what my successor in 1911 may reasonably expect on an average from a Burman staff that has learnt the elements of its business. Posting and tabulating were delayed by our having to wait while a matter of 175,000 entries written in Hkün Shan were being translated by a special staff of Hkün Shan clerks who were sent to Rangoon from Kēngtūng for this purpose in September. The Kēngtūng schedules were among the last to be taken in hand, and it was not till they were made over to the posters to be posted that it was found that the clerks who had dealt with the ordinary Shan entries were unable to read those in the Hkün script. In the end posting and tabulating were completed, within a day or two of each other, towards the close of October. A certain amount of compilation work was done before the office moved up to Maymyo in November. A special gang of 72 Native of India clerks from the offices of the Accountant-General and the Examiner, Public Works Accounts, achieved a substantial portion during the October-November holidays. The rest was disposed of by a staff of clerks who accompanied me to Maymyo. The abstraction showed that the final totals for the Province were as follows:—

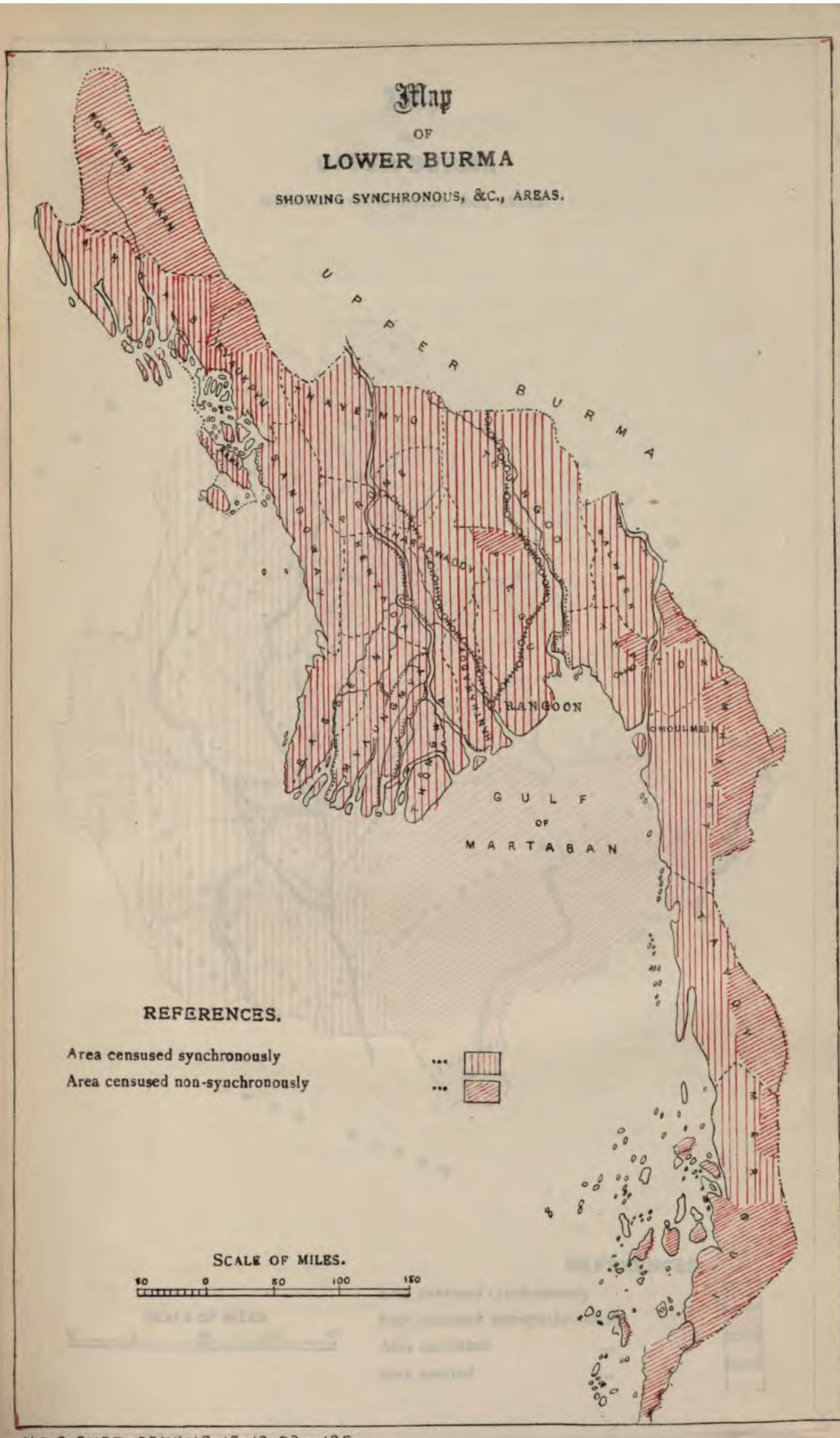
Males	5,342,033
Females	5,148,591
Total	10,490,624

Cost of the operations.

19. The following statement shows the cost of the operations, as compared with that of the census of 1891. It is approximate only, as the final accounts for the financial year 1891-92 have not yet been made up. In the Administrative Volume the accounts will be presented in greater detail and in a more final form, but the figures now given will afford a general idea of the relative cost of the two enumerations. It must be borne in mind that in 1881 and 1891 only the *extra* cost involved in the census was treated as census expenditure for the purposes of the Report. Thus, the salaries of all Government officers employed on census were then charged to ordinary administrative heads and were not debited to census, as at the last enumeration. For this reason a certain percentage should properly be deducted from the 1901 figures of cost if it is desired to institute a comparison with the cost of previous enumerations.

Head.	1891 Census.				1901 Census.			
	1890-91.	1891-92.	1892-93.	Total.	1900-01.	1901-02.	1902-03.	Total.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Enumeration ...	19,049 7 7	713 5 9	.....	19,762 13 4	23,902 13 1	3,680 13 0	.....	27,583 10 1
Abstraction ...	4,195 13 6	83,210 5 4	16,771 10 7	1,04,177 13 5	4,668 8 8	66,344 8 4	4,232 14 6	75,245 15 6
Superintendence	5,908 11 5	3,251 6 8	1,615 8 7	10,775 10 8	25,264 2 9	29,073 12 5	11,500 0 0	65,837 15 2
Total ...	29,154 0 6	87,175 1 9	18,387 3 2	1,34,716 5 5	53,835 8 6	99,099 1 9	15,732 14 6	1,68,667 8 9

Calculated on this basis, the cost of enumeration per head of the population was 3·1 pies, as compared with 3·3 pies per head in 1891, and between 3·9 and 4 pies per head in 1881. In the Administrative Volume I shall endeavour to show that the actual cost per head was somewhat below 3·1 pies.



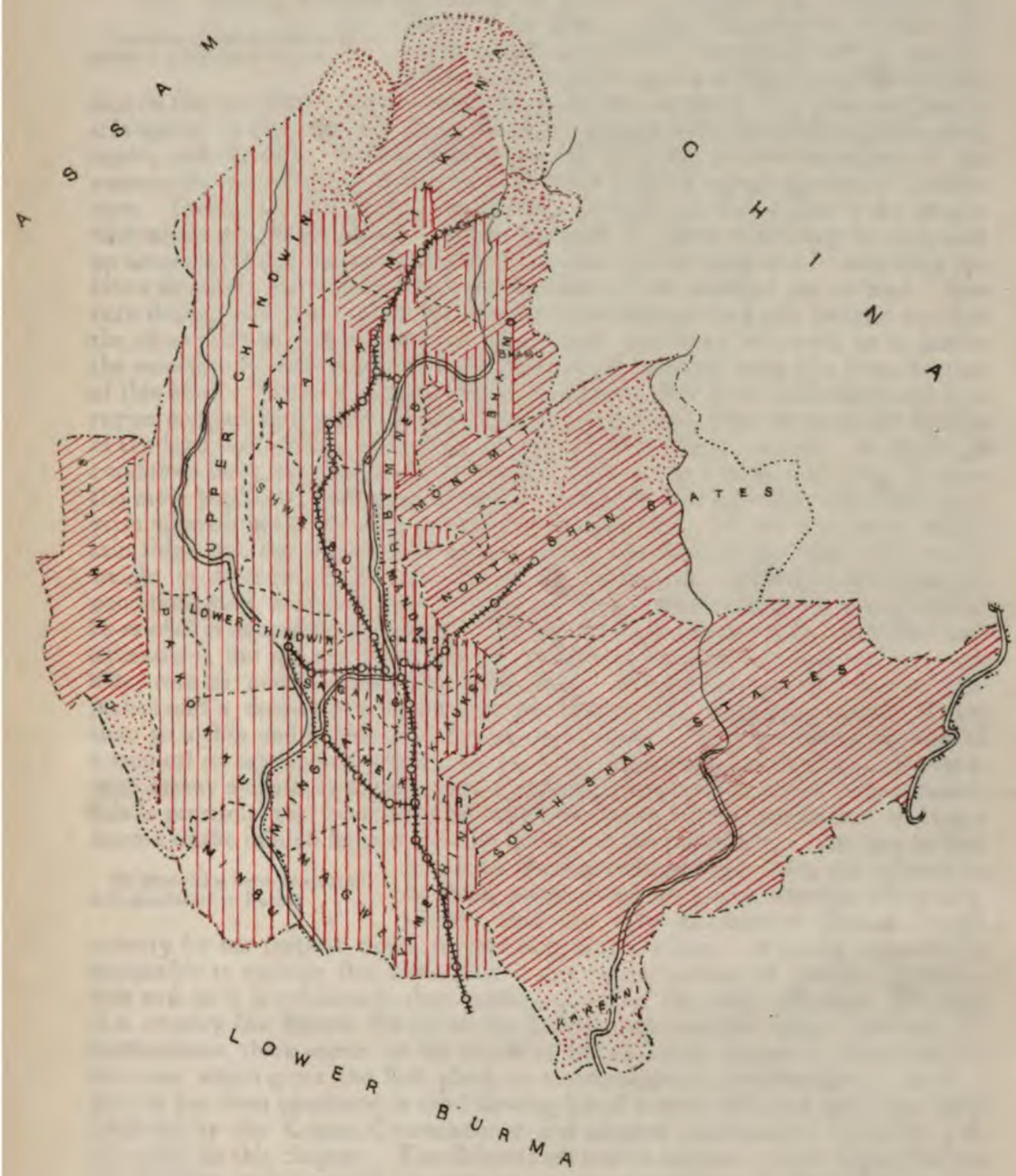
NO, 6 SUPT: CENSUS, 15-12-03—135.

Map

OF

UPPER BURMA

SHOWING SYNCHRONOUS, &C., AREAS.



SCALE OF MILES.

50 0 50 100 150

REFERENCES.

Area censused synchronously

Area censused non-synchronously

Area estimated ...

Area omitted ...

0, 6 SUPT: CENSUS 15-12-03—135.

CHAPTER I.

THE DISTRIBUTION OF THE POPULATION.

20. Having ascertained exactly the total of our population, the first of our duties is to form a general conception of how that population is spread over the natural no less than the political and social divisions of the area within which it was on the 1st March 1901 enumerated, to determine where it is dense and where it is sparse, to learn how the town-dwellers compare with the residents of the rural tracts, and the like. For the present we will leave the social distribution of the community out of consideration and look at its political and geographical distribution. There is no difficulty in ascertaining the political distribution of the people with whom we are concerned. When, however, it comes to dividing the province up according to its natural or physical features for the purpose of comparing relative densities, the task is, if over-subdivision is to be avoided, not so easy. In a note dealing with this matter the Census Commissioner for India pointed out that the close relation existing between rainfall and population was such as to justify the selection of meteorological conditions as the primary basis of a classification of this kind. Stated in general terms, the theory that in a torrid clime and in a region peopled by a nation of agriculturists, population depends upon the fertility of the land and fertility, in its turn, on rainfall is, no doubt, correct. A variety of conditions have, however, to be identical if, of two equal areas, the wetter is to be the more populous; both must be equally accessible, for instance, both must comprise approximately the same extent of cultivable land. If one is a barren mountain ridge and the other a well-watered valley, the amount of rainfall will have no weight in determining the strength of the population. In Burma the required conditions vary so largely that a rough and ready classification of areas according to rainfall is exceedingly difficult. The dry districts are, as a rule, open, level and accessible; the wet are frequently the same; as often as not, however, they are hilly, remote and ill-adapted for cultivation. Mergui has a rainfall of over 150 inches and a density of 9 inhabitants per square mile, Sagaing a rainfall of less than 50 inches and a density of 152 per square mile. No one would, in the case of a tropical or sub-tropical region, venture to lay down as an axiom that a light monsoon meant a dense, and heavy rains a sparse, population, yet, as will be seen below, this is precisely the inference that would be drawn from a comparison in Upper Burma of the rainfall figures with the density of the population. The fact is that in Burma the one universal rule is for the uplands to be thinly peopled and the plains, whether wet or dry, thickly, and the only satisfactory division of the country for our purpose would be into high and low land. It would, however, be impossible to embody this distinction in any formal scheme of district classification and, as it is indubitable that, *caeteris paribus,* the more abundant the rains in a country like Burma the richer the paddy crops and the larger the host of husbandmen, there seems on the whole to be no better system of classification than one which gives the first place to meteorological considerations. Such a system has been employed in the following list of natural divisions which has been approved by the Census Commissioner and adopted in subsidiary Table No. I-A appended to this chapter. The divisions are four in number: (1) the Upper Burma wet division, with a rainfall of over 50 inches, comprising the Shan States, the Chin Hills and the damper districts of Upper Burma; (2) the Upper Burma dry division, with a rainfall of under 50 inches, embracing all the districts of the dry zone; (3) the Lower Burma littoral (and deltaic) division, where the rainfall exceeds 90 inches, namely, generally those districts on and adjoining the sea-coast; and (4) the Lower Burma sub-deltaic division, consisting of five inland districts with a rainfall of less than 90 inches. These divisions coincide to a certain extent

Selection of natural divisions in which to exhibit distribution.

No connection between rainfall and population in Burma.

with the classes enumerated in paragraph 13 of Mr. Eales' 1891 Report. In detail they are as follows :—

I.—Upper Burma (wet)	...	Upper Chindwin, Katha, Bhamo, Myitkyina, Ruby Mines, Northern Shan States, Southern Shan States, Chin Hills.
II.—Upper Burma (dry)	...	Yamèthin, Meiktila, Kyauksè, Myingyan, Sagaing, Shwebo, Lower Chindwin, Pakôkku, Magwe, Minbu, Mandalay.
III.—Lower Burma (littoral and deltaic).		Akyab (with Northern Arakan), Kyaukpyu, Sandoway, Bassein, Myaungmya, Thôngwa, Hanthawaddy, Rangoon Town, Pegu, Thatôn (with Salween), Amherst, Tavoy, Mergui.
IV.—Lower Burma (sub-deltaic)		Thayetmyo, Tharrawaddy, Henzada, Prome, Toungoo.

In the maps appended to this chapter are shown the densities of the different districts of Upper and Lower Burma as well as those of nearly every township in the province. The district density is in each case indicated by green shading, the township by red figures. We are not here intimately concerned with the latter, but may with advantage pause to consider how the districts of the four "natural" divisions figure on the map.

District densities.

21. A glance at Division I, as shown on the map, would, as I have remarked above, at first sight incline one to the belief that in Burma a high rainfall meant a scanty population, for the whole of the wet area, without exception, has the light shading, which indicates a low density. With the exception of Katha none of the districts can boast of as many as twenty-four inhabitants per square mile, and Katha is only just in excess of the above figure. We know, however, that rainfall has had nothing to do with the scantiness of the population of the tracts in question. They are all hilly and on the whole rugged, and it is their mountainous character alone that is responsible for their dearth of residents. The averages for the Shan States give no conception, of course, of the fertile and populous stretches that extend here and there like oases amid the uninhabited uplands. The state of Pang Ni, for instance, has a density of 119, that of Nawng Wawn 117 inhabitants per square mile. It has not however been found convenient to indicate the density for anything smaller than the two main political charges on the map, except in the same way that the township figures have been indicated in Burma proper, namely, in red ; for the purposes of a general average the favoured States have had perforce to be lumped with the unblessed. In Division II as in Division I, one is confronted with figures that appear at first sight anomalous. Here, if anywhere in Burma, are to be found the famine districts of the province ; here alone are the prospects of an ample harvest ever a matter of doubt ; yet here we find a density ranging from a minimum of 51 to a maximum of 152 inhabitants per square mile. The districts lie along the valleys of the Chindwin and the Irrawaddy or are watered by the streams from the neighbouring highlands and, for all their meagre rainfall, succeed in supporting a by no means insignificant population. When we turn to Lower Burma we find far more variety within the divisions ; here again the rain-gauge is no guide. Kyaukpyu, Sandoway, Tavoy and Mergui in Division III are all extraordinarily wet, and at the same time, in consequence of their hills, very thinly populated and the same may be said of Northern Arakan and Salween, which, though not, strictly speaking, coast districts, are included in Division III, as partaking rather of the nature of the districts to which they form, so to speak, a Hinterland than of that of any other portion of the province. Akyab, Thatôn and Amherst enjoy a heavy rainfall, but, having more cultivable plain land, show a higher density than the districts previously named. In the delta the rains, though heavy, are not so heavy as on the Arakan and Tenasserim coasts, but nearly the whole of the vast level is capable of being brought under the plough and it is here that the population is on the whole thickest. In this category come Bassein, Thôngwa, Myaungmya, Hanthawaddy and Pegu, with densities varying from 160 to 79 persons per square mile. Pegu is composite in nature : its northern portion falls more properly into Division IV, which is discussed below, and hardly any portion of it, as at present constituted, touches

the sea, but for various reasons it appears convenient to treat it as a coast district. Though the delta districts of Division III have, on the whole, most inhabitants of any in Burma, it is a district of Division IV that is actually the most thickly populated in the province. Each square mile in Henzada carries on an average 169 people or nine more even than Hanthawaddy, which in point of density comes second in the province. Henzada is, properly speaking, a delta district, and its conditions are much the same as those of Bassein, Thôngwa and Myaungmya, but no portion of its area is near the sea and it has therefore been classed with Tharrawaddy, Prome, Toungoo and Thayetmyo as a sub-deltaic district in Division IV.

Provincial density.

22. For Burma as a whole, exclusive of the Shan States and the Chin Hills, the density of population per square mile is 55, as compared with 45 in 1891, or, taking as a basis for computation the revised figures that have been obtained during the interval by re-survey, 46. Calculated on the figures for the province as a whole (*i.e.*, including the Shan States and the Chin Hills), the figure is 44. This, of course, compared with the bulk of European countries and the rest of India, is extraordinarily low. The mean density for the whole of India in 1891 was 184 persons per square mile, a figure which is rather above the Burma district maximum. It may be of interest to note, however, that the Burma density is higher than that of both Sweden and Norway and is not far removed from that of Russia in Europe. According to the census held on December 3rd, 1900, the density for Norway was 17·9 only, and at the close of 1899 that for Sweden was estimated at 29·5 per square mile. In European Russia the first general census of the population, which took place on the 9th February 1897, gave a density of 51 per square mile, which is actually lower than the figure for Burma proper, though above that for the whole province with Shan and Chin land. In the first year of the century that has just elapsed the density of the population in England and Wales was 153 inhabitants per square mile. The preliminary figures for the census of the 1st April 1901, the first year of the new century, show that that density has now risen to 558 per square mile; in other words England and Wales are at the present moment almost exactly ten times as thickly peopled as Burma proper and have a population more than twelve times as dense as that of the whole of the regions with which the Provincial Census Department had dealings.

This is not the place to discuss the difference between the mean district densities for the recent and previous censuses, though these earlier figures are given in Subsidiary Table I-A. It will be sufficient to state merely that there has been a steady increase throughout the province, and to remind those interested that, in consequence of the more accurate survey alluded to above, the densities for previous years now given differ slightly from those embodied in the earlier reports.

Urban and rural population.

23. Another point of view from which the population may be regarded is that selected with the object of ascertaining its distribution over the town and country areas of the province respectively. This distribution is indicated in Imperial Tables Nos. I and III and in the Diagram showing "total and urban population by districts," which is appended to this chapter. Let us first take Table No. I, which is to be read with the diagram. We here find that of the total population of the province 9,500,686 persons, or 90·6 per cent. of the aggregate, were enumerated in rural areas and 989,938 or 9·4 per cent. in urban. In the Rangoon Town district the whole of the population is urban. In the Mandalay district rather over half the inhabitants live in towns, but the diagram shows that in all the other districts of the province the urban element, indicated in black on the bar concerned, is relatively small. In the Amherst district the black section of the bar represents 20·7 per cent. of its total length; elsewhere, except in the case of Tavoy, the proportion to the total population living in towns is less than one-fifth of the total district population. A striking feature brought out by the diagram is the fact that Hanthawaddy, which is not only the most populous district in the whole of Burma, but, after Rangoon Town, Mandalay and Henzada, the most densely peopled, is inhabited by a purely rural population. In 1891 the urban population of the province amounted to 946,649, or to 12·4 per cent. of the total population, that is to say, was 3 per cent. higher than in 1901. The fall during the decade from 12·4 to 9·4 per cent.

is due partly to the fact that the Shan States and the Chin Hill areas, comprising a vast population that is purely rural in character, were ten years ago excluded for the most part from the dealings of the Census Department. Apart from this, however, the urban figures for Burma proper show a real decline. The 1891 ratio for Burma proper was the same, for all practical purposes, as for the province as a whole (12·4 per cent.), for the political areas only affected the percentage figures in the second place of decimals. The percentage for the same area, *i.e.*, Burma proper, at the recent census was 10·7 only. The inference to be drawn from this is that in Burma the growth of the urban population does not keep step with the growth of the population as a whole. This I believe to be the case and I shall have more on the subject to say when dealing directly with the movement of the population.

Imperial Table No. I of little value for purposes of comparison of urban population.

24. I must, however, here point out that the value of the figures last quoted is seriously vitiated by the fact that the areas on which the calculations for the two censuses are based are not identical. For both years the urban area has been taken to mean the area of towns treated as such for census purposes, and the rural as that lying outside the limits of census towns, but all the 1891 census towns do not figure in the 1901 list, nor were all the 1901 census towns classified as such at the preceding census. The definition was in both years more or less arbitrary. The differences in the two lists of towns are not very great, but they are great enough to detract sensibly from the usefulness of the figures for purposes of comparison. In fact if a contrast between the data furnished at the last and at the 1891 census is desired, or if we wish to place side by side the figures for Burma and other provinces or countries, the only useful table is Imperial Table No. III, which attempts no definition of towns or villages, but contents itself with applying a purely numerical test for the purposes of classification. Taking the data that this table affords as a basis for our calculations and treating all collections of houses containing more than a specified number of inhabitants as towns and all such as do not contain that number as villages, we have material for an instructive comparison.

Numerical distinction between towns and villages.

25. The chief difficulty consists in fixing the numerical limit for the "town," but here European practice affords a guide. In Germany every continuous collection of houses permanently inhabited by not less than 2,000 persons is deemed, *ipso facto,* to possess urban characteristics and is classified as possessing them. A distinction is, however, drawn between the *Landstädte* or "rural" towns of between two and five thousand inhabitants and *Kleinstädte* (small towns) of between five and twenty thousand inhabitants. Much the same classification appears to have been adopted in France, but in Belgium the line is drawn at 5,000 inhabitants, and no collection of houses containing less than that number of residents is there treated as a town. For definition purposes at the recent enumeration 5,000 was regarded as the figure below which the population of census towns was not ordinarily supposed to fall, and it may conveniently be taken as the dividing line between the urban and the rural population when we come to an examination of Imperial Table No. III. That table tells us that in Burma there were on the 1st March 1901, 972,813 persons living in areas inhabited by 5,000 or more people and 9,517,811 persons living in areas inhabited by less than 5,000 people, that is to say that the urban population was 9·3 per cent. and the rural 90·7 per cent. of the total population of the province. In Germany in 1890 the rural population, calculated on a similar basis, was 67·8 per cent. of the total population, the urban 32·2. In Austria in the same year 80·1 per cent. of the people were country-dwellers and 19·9 town-dwellers. On the other hand, in England and Wales in 1891, a total of 68·1 per cent. of the population lived in urban areas and 31·9 in villages.

The average number of inhabitants in each village and of residents in each occupied house.

26. The actual total of villages is 60,395, as compared with 28,719 at the preceding Census, and the average number of inhabitants per village has fallen from 232·7 to 157·3. This rise in the tale of villages with the resultant fall in the ratio is the outcome, not so much of the

extension of the Census area as of the wider interpretation put for the purposes of the tables on the term "village," which does not mean the charge of a separate village official, but is practically synonymous with "hamlet," *i.e.*, the smallest collection of buildings known by a separate name. Imperial Table No. I gives 168,508 and 1,924,303 as the totals of occupied houses in the towns and villages respectively of the province. We thus have 5·87 as the average number of residents in each house in the urban areas and 4·94 as the average number of residents in each house outside urban limits. Compared with the figures of the previous census (5·22 and 5·34) these totals are noteworthy, for while, on the one hand, the rural house density has fallen, the urban has risen. As I have observed in an earlier paragraph the decision as to what was and what was not to be a house for census purposes was for the most part left to the local authorities in each case and where so much scope has been allowed for the exercise of individual judgment certain variations in totals are in the natural order of things to be looked for. As a matter of fact I believe that the number of cases in which any doubt can have been entertained as to whether a building should be regarded as a census house or not must have been exceedingly small and that the personal factor may be treated as almost non-existent. If this is granted we may take it, I consider, first, that in the areas which have now for the first time been thoroughly censused,—namely, the Shan States and the Chin Hills,—the household, *i.e.*, the number of individuals inhabiting a single house, is on the whole rather smaller than in Burma proper and next that in towns the population is actually somewhat more thickly distributed than in 1891. As, however, the possibility of variation of treatment is not wholly absent, a point which is emphasized in the case of Rangoon below, it would neither in my opinion be safe to draw any far-reaching conclusions from the variation in the figures for the two censuses alluded to above nor profitable to undertake a detailed comparison of the house densities for the various districts of the province.

Overcrowding in Rangoon.

27. The question of overcrowding in cities has not reached in this province a stage which, from a European point of view, would be regarded as acute. Yet congestion is not wholly unknown in Rangoon, and the following few figures may be useful in showing to what extent it prevails in that city. Rangoon has an area of nineteen square miles, over which its population of 234,881 spreads at the average rate of 12,362 persons per square mile. In area, population and density it is not very dissimilar from the county borough of Nottingham according to the returns for that town in 1891. The figures for the two are as follows:—

	Area.	Population.	Density.
Nottingham, 1891	17 square miles	203,877	12,508 per square mile.
Rangoon, 1901	19 „ „	234,881	12,362 „

The preliminary figures for Nottingham at the 1901 census were 239,753, so that the existing populations of the two towns are within five thousand of one another. In fact, of all English boroughs, Nottingham is still the nearest in point of numbers to Rangoon. Compared with other towns of the United Kingdom the density exhibited by Rangoon, though it is nearly three thousand per square mile higher than in 1891, is by no means excessive. The density of Liverpool in 1891 was 50,782 persons per square mile, that of Plymouth 35,103, and, as the population of Liverpool has increased by 8·80 per cent. in the interval and that of Plymouth by 20·90 per cent., the density must, unless the areas of the towns have been extended, be still higher now. We may take it, therefore, that Rangoon as a whole could bear a substantial increase to its population without laying itself open to the charge of overcrowding. Within our nineteen square miles, however, we have areas of very varying degrees of density. Open stretches like the brigade parade-ground and the Cantonment Church maidan affect the average enormously and, if these are left out of consideration, the density figure mounts to a surprisingly high level. Let us take, for instance, those blocks lying between Godwin road and Judah Ezekiel street which are bounded on the south by the Rangoon river and on the north by portions of Montgomery, Fraser, and Canal streets. They comprise the bulk of the business portion of the city, the bazaars, the merchants' offices, the banks, and all the most frequented thoroughfares. They cover

468·7 acres and have a population of 73,309 souls. This gives a density of 99,840 persons per square mile, or nearly double that of Liverpool (the most crowded town of the United Kingdom) as a whole. It is not for a moment to be supposed that there are not areas of an equal if not of larger size in Europe and America which are more thickly peopled than this portion of the city, but it must be borne in mind that climate, sanitation and the prevailing type of architecture are all points that have to be taken into consideration. A density of 100,000 souls per square mile would be nothing alarming in an area covered with trans-Atlantic "sky-scrapers," but where the distribution *strata* are on the whole less than three in number, matters assume a different complexion. As it is the figures given are quite sufficient to show that any substantial increase in the density of the population of these particular quarters of Rangoon would be a standing menace to the health of the community.

Measures taken to obviate congestion.

This fact has already been recognized by the municipal authorities, who, with a view mainly to minimizing the danger from fire, but with an eye, no doubt, also to the obviation of further congestion, have prescribed special building rules for the area above referred to, the exact boundaries of which are given in the schedule to the Local Government's Municipal and Local Department Notification No. 182, dated the 31st October 1899. Expansion outwards is practically impossible within the narrow limits, and such further building as is undertaken will have in the future to be for the most part upwards, *i.e.*, will have to take the form of additional storeys, and the Municipal Committee have taken power to cope with this form of expansion by regulating the number of storeys in houses built within the scheduled area. No building is allowed to have more than four storeys or be more than seventy feet high; no building abutting on a street less than fifty feet wide may have more than two storeys without special sanction from the Committee; the minimum height of the roof above the uppermost floor has been prescribed. The operation of these rules ought certainly to be beneficial. If it were merely a question of the better housing of the existing population on the existing area, there would be every reason for encouraging the erection of many-storeyed houses, but it would be useless to expect that the provision of additional accommodation would not mean an influx from less congested, but more unpopular, quarters and a further increase in density.

28. The total number of houses within the scheduled area is 12,000, so that the average number of persons inhabiting each house is 6·1. For census purposes the "tenement" was regarded as a house and numbered accordingly. Rule 4 of a special manual for Charge Superintendents and Supervisors, based on the provincial manual, which was issued by the Municipal authorities before the preliminary enumeration, runs as follows :—

Average number of inhabitants per house in the scheduled area.

"A house in this manual means any house or apartment to which a census number is given. A cooly-barrack having twenty separate apartments will probably have twenty census numbers and forms twenty census houses."

From the President's report it would seem that during the operation of house-numbering the tendency of the Rangoon census officers was, if anything, in the direction of over minute subdivision, so that often "house" must have meant nothing more than "apartment." This being so, there can hardly be any question that the census house in the city was often of exceedingly restricted dimensions and that its average capacity was in all probability frequently far below the provincial mean. If this assumption is correct the average of inhabitants per house in Rangoon cannot be regarded as in any way low.

29. It is in cooly-barracks of the kind alluded to in the rule quoted above that the temptation to overcrowd is greatest. Here again the Municipal Committee have not been slow to recognize that a danger exists and have taken certain steps to meet it. Their rules for the registration of registered buildings are specially designed to give the authorities responsible for the health of the town full control of all those collections of tenements in which numbers of the poorest classes of natives live herded together, often amid the most insanitary conditions of life. They provide *inter alia* that in registered buildings each lodger shall have not less than 24

Registered buildings.

square feet of floor room to occupy. I doubt whether there are many who would consider this, even as a minimum, generous measure and am inclined to think that overcrowding might be said to have exceeded all bounds in this or the other area long before the above minimum was approached. However, the rule shows that the authorities have recognized the necessity for ensuring the provision of something approaching adequate house-room in those classes of buildings in which the law allows the exercise of municipal supervision. It has not been found practicable to enforce the lodging-house rules in the past quite as stringently as might have been wished, but it is intended to insist upon them more rigorously in the future. Even as they stand they are a potent weapon in the hands of the committee for combating the evils of overcrowding.

No return of boat population.

30. In 1891 special measures were taken to secure a full and accurate return of the boat population of the province. A form of register was from the very outset prescribed for boat landing-places, boat schedules were indented for separately from house schedules and special rules for the enumeration of the boat population were issued. The information which these measures were designed to obtain was not required for any of the Imperial Tables, which were only concerned with two main social classes of the population, the urban and the rural. At the recent census the rules of procedure, though they dealt fully with the matter of boat enumeration, contained no special provision for showing the floating population separate from the land population. The reason for this omission is obvious from the 1891 returns. Where figures for boat population have been given, as, for instance, in Burma and in Bengal, a comparison with the figures of the previous census (that of 1881) has demonstrated their uselessness. In paragraph 34 of his report Mr. Eales subjected the surprising discrepancies between the divisional totals for the two censuses in Burma to a minute and painstaking examination. His investigations showed clearly that it was largely a matter of chance whether a boatman was enumerated on shore or on his boat and left no doubt as to the impracticability of obtaining reliable data except at an expense of time and labour that the results would be far from justifying. In Bengal the general agreement of the figures for 1891 and 1881 suggested the "approximate accuracy of the whole," but even here Mr. O'Donnell, the Census Superintendent, was forced to admit that in more than one case the district totals were unquestionably wrong and untrustworthy. Altogether there was nothing in the records of past enumerations to encourage the abstraction office to attempt to repeat the efforts of 1891 and 1881. The matter of the strength of the boat population is no doubt one of interest in the province, but it is hoped that the information contained under this head in the Provincial Tables will suffice for ordinary requirements.

SUBSIDIARY TABLE NO. I-A.

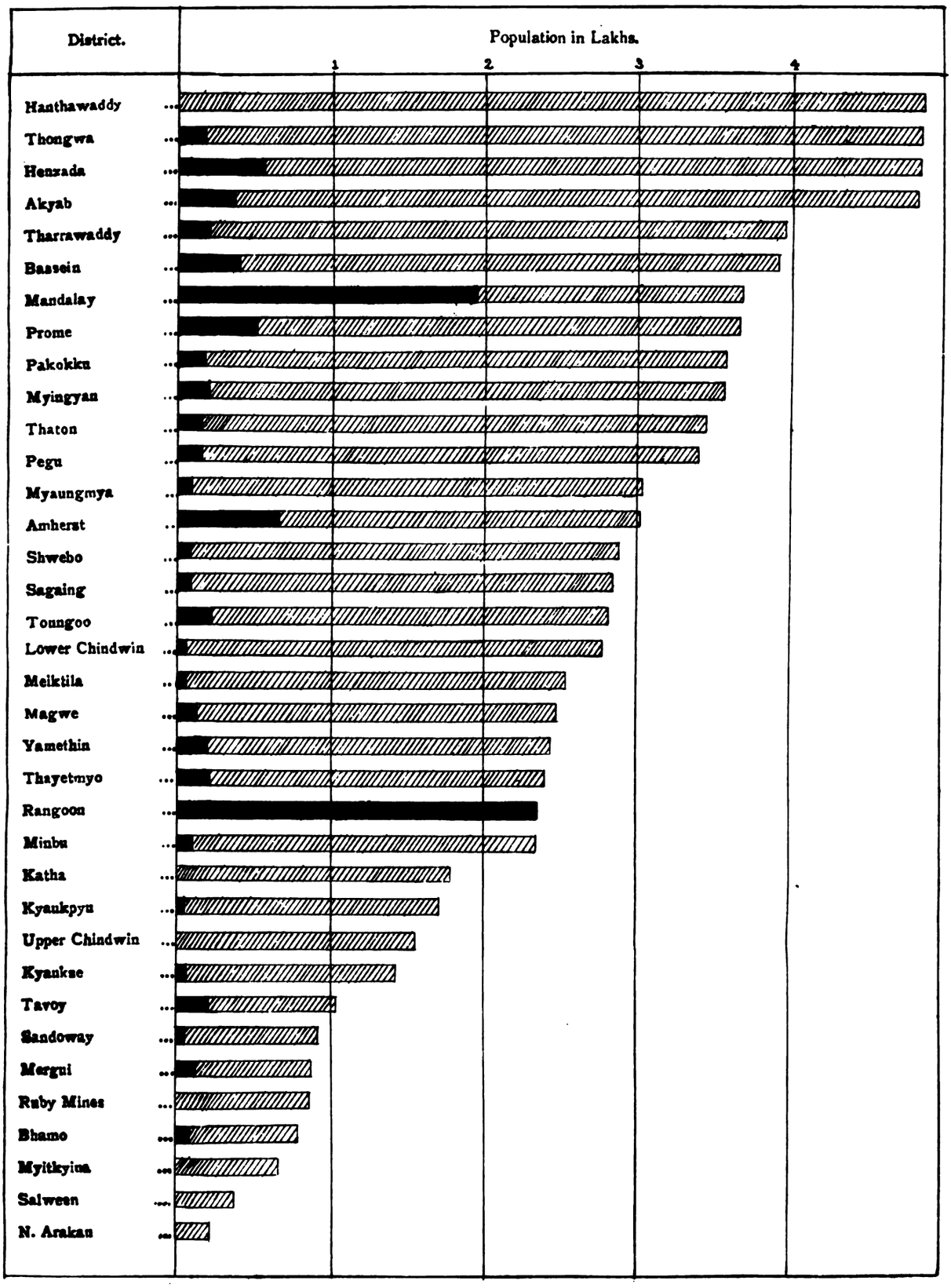
Density of the Population.

No.	Natural divisions, districts, and cities.	Mean density per square mile.				Variation; increase (+) or decrease (—).			Net variation, 1872—1901.
		1901.	1891.	1881.	1872.	1891 to 1901.	1881 to 1891.	1872 to 1881.	
1	2	3	4	5	6	7	8	9	10
							...	...	...
							...	...	...
1	Katha ...	25	20	...	...	+ 5	...	...	...
2	Bhamo ...	19	10	...	...	+ 9	...	...	...
3	Northern Shan States	19	...	...	...	...	...	...	...
4	Southern Shan States	19	...	...	...	...	...	...	...
5	Upper Chindwin ...	18	6	...	...	+ 12	...	...	...
6	Ruby Mines ...	16	6	...	...	+ 10	...	...	...
7	Chin Hills ...	11	...	...	...	...	...	...	...
8	Myitkyina ...	6	5	...	...	+ 1	...	...	...
9	Pakôkku Chin Hills ...	5	...	...	...	...	...	...	...
	UPPER BURMA, WET ...	15	8	...	...	+ 7	...	...	...
1	Sagaing ...	152	132	...	...	+ 20	...	...	...
2	Meiktila ...	116	100	...	...	+ 16	...	...	...
3	Myingyan ...	114	112	...	...	+ 2	...	...	...
4	Kyauksè ...	111	99	...	...	+ 12	...	...	...
5	Mandalay (rural) * ...	87	89	...	...	— 2	...	...	...
6	Magwe ...	85	75	...	...	+ 10	...	...	...
7	Lower Chindwin ...	79	67	...	...	+ 12	...	...	...
8	Minbu ...	71	65	...	...	+ 6	...	...	...
9	Yamèthin ...	57	49	...	...	+ 8	...	...	...
10	Pakôkku ...	57	50	...	...	+ 7	...	...	...
11	Shwebo ...	51	41	...	...	+ 10	...	...	...
	UPPER BURMA, DRY ...	79	70	...	...	+ 9	...	...	...
1	Hanthawaddy ...	160	131	98	62	+ 29	+ 33	+ 36	+ 98
2	Thôngwa ...	139	96	68	43	+ 43	+ 28	+ 25	+ 96
3	Myaungmya ...	102	70	41	24	+ 32	+ 29	+ 17	+ 78
4	Bassein ...	95	77	65	49	+ 18	+ 12	+ 16	+ 46
5	Akyab ...	94	81	70	54	+ 13	+ 11	+ 16	+ 40
6	Pegu ...	79	56	43	26	+ 23	+ 13	+ 17	+ 53
7	Thatôn ...	68	52	45	33	+ 16	+ 7	+ 12	+ 35
8	Amherst ...	43	33	26	18	+ 10	+ 7	+ 8	+ 25
9	Kyaukpyu ...	38	37	34	33	+ 1	+ 3	+ 1	+ 5
10	Sandoway ...	24	21	17	15	+ 3	+ 4	+ 2	+ 9
11	Tavoy ...	21	18	16	14	+ 3	+ 2	+ 2	+ 7
12	Salween ...	14	12	11	10	+ 2	+ 1	+ 1	+ 4
13	Mergui ...	9	8	6	5	+ 1	+ 2	+ 1	+ 4
14	Northern Arakan ...	4	3	3	2	+ 1	...	+ 1	+ 2
	LOWER BURMA, LITTORAL.	55	43	34	25	+ 12	+ 9	+ 9	+ 30
1	Henzada ...	169	152	127	89	+ 17	+ 25	+ 38	+ 80
2	Tharrawaddy ...	139	119	95	60	+ 20	+ 24	+ 35	+ 79
3	Prome ...	125	127	113	96	— 2	+ 14	+ 17	+ 29
4	Thayetmyo ...	50	53	36	33	— 3	+ 17	+ 3	+ 17
5	Toungoo ...	45	34	31	22	+ 11	+ 3	+ 9	+ 23
	LOWER BURMA, SUB-DELTAIC.	90	82	68	51	+ 8	+ 14	+ 17	+ 39
	BURMA (RURAL) ...	52	44	...	...	...	...	...	...
	BURMA (RURAL) WITH SHAN STATES, &C.	42	...	...	...	...	...	...	...
1	Rangoon ...	12,362	9,491	7,062	5,197	+ 2,871	+ 2,429	+ 1,865	+ 7,165
2	Mandalay * ...	7,353	7,553	...	...	— 200	...	...	...
	BURMA (WHOLE) ...	55	46	...	...	+ 9	...	...	...
	BURMA (WHOLE) WITH STATES.	44	...	...	...	...	...	...	...

* The density shown on the map is for the rural and urban areas of Mandalay combined.

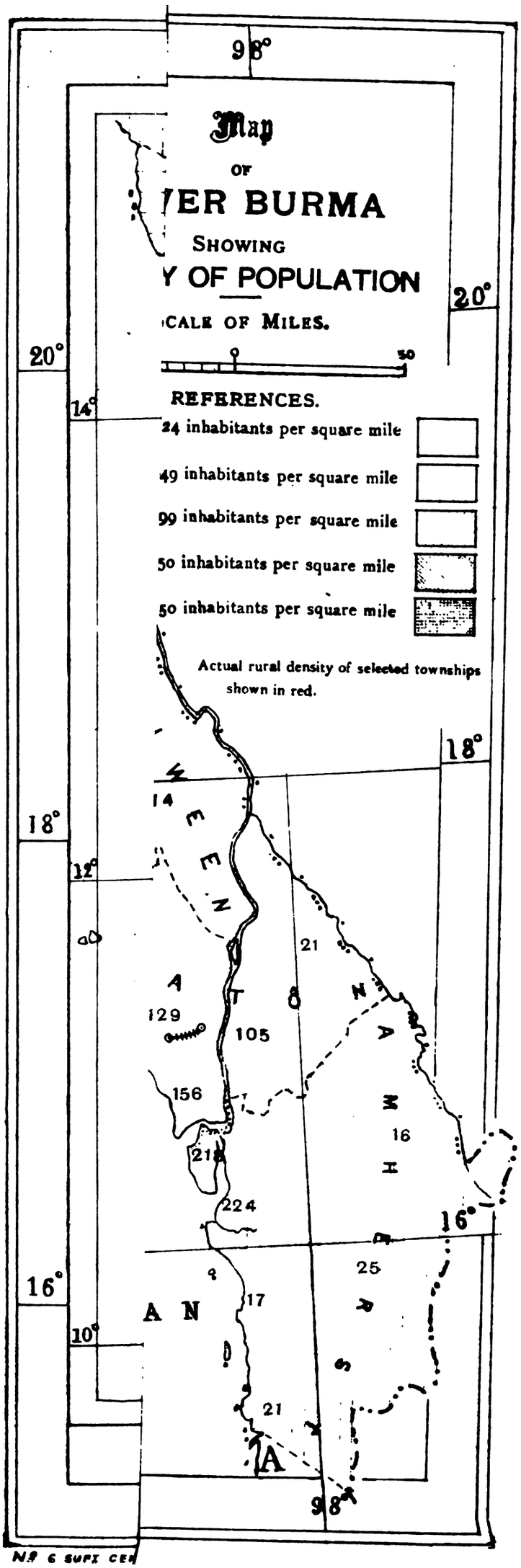
CENSUS 1901.

TOTAL AND URBAN POPULATION BY DISTRICTS, 1901.



THE total length of each bar represents the aggregate population of the district, while the black portion of the bar indicates the urban element, that is, the total population living in "towns" defined as such for Census purposes.

No. 6, SUPT. CENSUS 8-4-02—1210.


98°
Map
OF
ER BURMA
SHOWING
Y OF POPULATION
CALE OF MILES.
0
50
20°
20°
14°
REFERENCES.
24 inhabitants per square mile
49 inhabitants per square mile
99 inhabitants per square mile
50 inhabitants per square mile
50 inhabitants per square mile
Actual rural density of selected townships shown in red.
18°
18°
12°
16°
10°
16°
98°
W E E N
A T A N
A N
A
129
105
156
218
224
21
16
25
17
21
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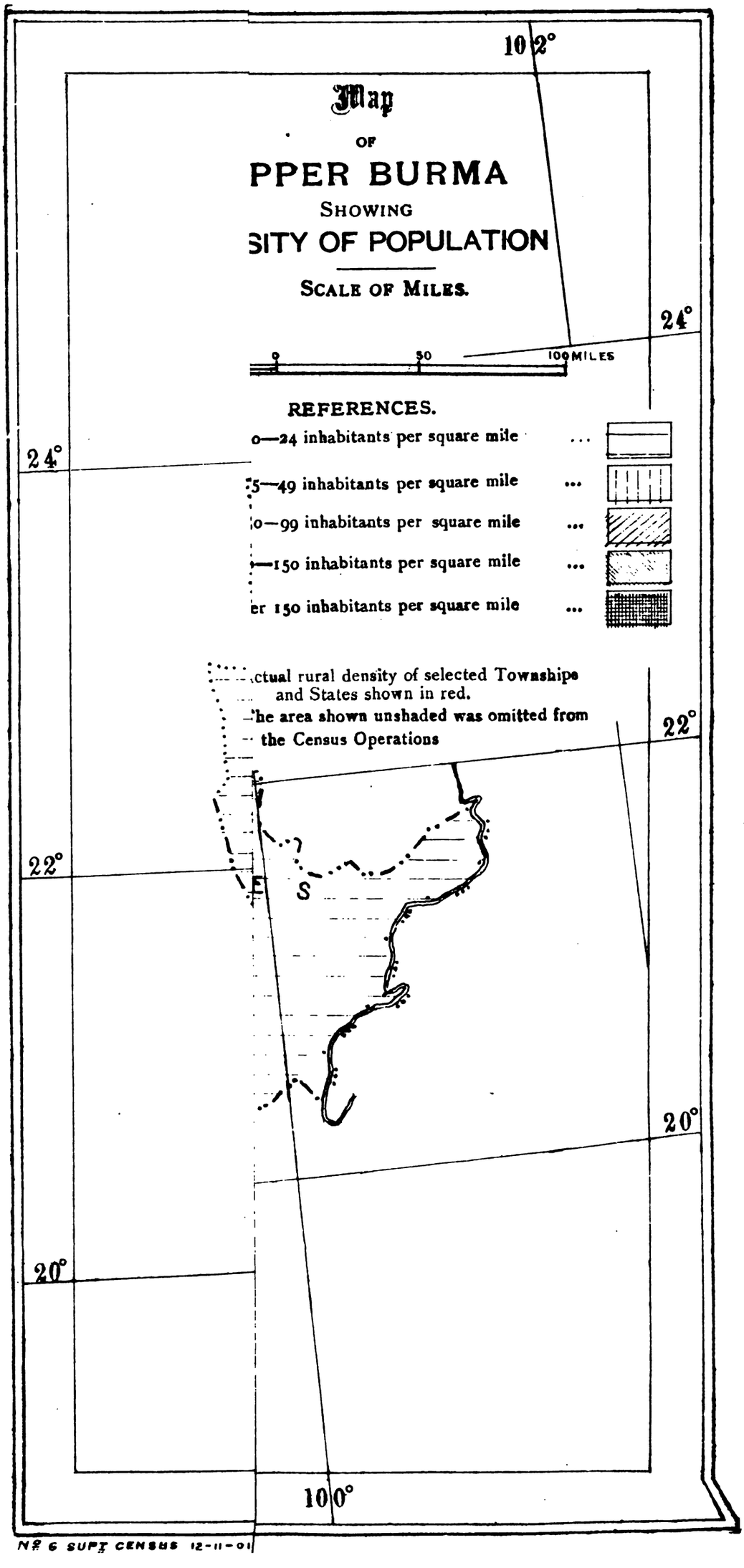

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CHAPTER II.

THE MOVEMENT OF THE POPULATION.

Factors regulating the movement of the population.

31. In his *Grundriss zum Studium der Politischen Oekonomie* Professor Conrad tells us that the causes which regulate the movement of the population (*Bevolkerungsbewegung*) may be classified as follows: (1) Marriages and divorces, (2) Births, and (3) deaths, which may be called the "natural" factors, as opposed to the "social factors," (4) immigration and emigration. While admitting that, strictly speaking, marriages indubitably constitute a social factor and contribute indirectly only to an actual increase in population, he prefers to classify them with the other natural factors rather than treat them on the same footing as the phenomena connected with the alteration of habitat, to wit immigration and emigration. When dicussing the movement of the population of Burma we may leave the first of the three natural factors (marriages and divorces) entirely out of consideration and therefore need not go into the merits of the somewhat academic question of whether marriage should be treated as a natural or as a social factor. All that is required in the present chapter is to bear in mind the essential distinction between the natural and social factors, and to keep it clearly in view when examining and attempting to analyse the movement of the population of the province.

An enormous tract of country that had never been previously enumerated was brought within the scope of the 1901 operations. It follows, therefore, that a comparison of the Provincial total of the 1901 census with that secured at the 1891 enumeration yields no result of any particular value. The operations that are just over dealt with nearly twenty-four lakhs more people than had been numbered ten years before, but this figure is, of course, no real measure of the growth of the population of the province during the interval. We know, however, that population has been increasing steadily during the past decade in Burma and that, as a general rule, the inhabitants of a given area were more numerous in 1901 than they were ten years before. We may further, for all practical purposes, treat Burma proper, that is excluding the Shan States and the Chin Hills, as an area which, in extent, is the same now as it was ten years ago. Within this area the population has risen from 7,722,053 to 9,252,875, or by rather over a million and a half, and it is now necessary for us to try and form some estimate of how much of this increase of 19·8 per cent. (which, it is interesting to note, is 7·6 per cent. higher than the decennial rate of increase in England and Wales during the same period) is due to the "natural" factors referred to above and how much to the "social." The matter is of special interest in Burma which more than any other province of the Empire owes its annual increment to extraneous sources.

The natural factors.

32. The estimate can at best be rough, for not only is the registration of the two forms of migration defective, but even that of vital statistics is as yet in its infancy in the province. Up till recently neither births nor deaths were registered in the rural areas of Upper Burma. Deaths are now recorded in the majority of these areas, but births are still unregistered. Save in the case of Christians, marriages are not registered at all in any portion of the province and in any case for the purposes of our rough estimate they may, as I have already said, be left entirely out of consideration. So far as they go, however, the figures may be instructive. Let us first take Lower Burma, where vital statistics have been duly recorded for a reasonable number of years. The total number of births and deaths registered in the Lower Province (including Thayetmyo, but excluding Salween and Northern Arakan), during the ten years 1891-1900, are as follows:—

Births	1,360,361
Deaths	1,056,735

According to the above figures the increase in the population during the decade (leaving immigration and emigration out of the question) should have been to the extent of 303,626, whereas the actual increase in population from 1891 to

1901 in Lower Burma, including Thayetmyo but excluding Northern Arakan and Salween, was 974,594, or more than three times the above amount. If implicit reliance were placed upon vital statistics, we should accordingly calculate the increase in the population due to immigration at 670,968. It would be unwise, however, for us to pin our faith on these figures. What Mr. Eales in his 1891 Report says about births and deaths registration in Rangoon is applicable with even greater force to the rest of the province. He remarks as follows in paragraph 42 :—

"Leaving Hindus, Musalmans and Christians out of the calculation, we are still forced to believe that the registration of births is very defective, as it falls so far below the return of the rural tracts. This agrees with what the President of the Municipality himself said. Deaths, he believes, are accurately reported. There are so many people, including the police and the undertaker, who must know about every death that occurs and there is also the body to be disposed of. Moreover, a funeral in Burma is quite a social function and there is no rite to correspond to Christian christening, except the ear-boring, which is not celebrated till the child is some years old and many children die before their ears are pierced. But any Burmese loafer will walk miles to be present at a funeral which is generally celebrated with music and dancing, and a general feast if the means of the relations of the deceased will permit of it. * * * It is difficult, therefore, with doubtful returns, both in birth-place and vital statistics, to ascertain what is the rate of natural increment or of decrease since 1881."

Unreliability of birth and death statistics.

33. How faulty, in all probability, the births and death figures for the past decade are can best be reailzed from a comparison with the statistics furnished by countries where the system of birth and death registration has achieved some degree of accuracy. Let us take for instance the Lower Burma birth-rates per mille for the years 1891, 1895, and 1900. They are as follows :—

	Birth-rate per mille.
1891	20·74
1895	29·04
1900	38·37

In 1891 the calculations were based on the figures of the then recent 1891 census and in this respect must have been far more reliable than those of later years. We find a birth-rate of 20·74 only. During the quinquennium 1891—95, the birth-rate in Europe ranged from 46·5 per mille in Russia to 22·6 in France. Though the Burmese are not extraordinarily prolific, there can, I think, be no question that their reproductive efforts cannot well have borne less fruit in 1891 than those of the French, for whom the dwindling of the national birth-rate has of recent years assumed the proportions of a national calamity. In 1895 the birth-rate per mille had risen in Lower Burma to 29·04. Here there is improvement in registration apparent, but it must be borne in mind that the population on which the rate was calculated must have been a good deal higher in 1895 than in 1891 and that a certain reduction in the figures of proportion will have to be conceded. In 1900 the figure had risen to 38·37 or, calculated on the population of Lower Burma in 1901, to 30·64. This, measured by a European standard, seems to bear some approximation to correctness, but the apparent increase of ten in the birth-rate per mille during the decade shows only the more clearly that, taken on the whole period of ten years, the figures are largely understated.

34. The case is much the same even with the Lower Burma death-rate, which, for the reasons indicated above, is more likely to come within the neighbourhood of accuracy than the birth-rate. The following are the figures for the three years selected—

	Death-rate per mille.
1891	15·93
1895	22·40
1900	27·51

The 1891 death-rate (15·93) seems manifestly incorrect. During the five years 1891—95 the ratio of deaths in Europe to every thousand of the population varied from 36·1 in Russia to 16·8 in Norway. He would be a rash man who would assert, when regard had been had to pestilence, dangerous beasts and defective hygiene, that there was less relative mortality in Lower Burma than in the most favoured of European countries. The 1900 death-rate, calculated on the 1891

figures, is 27·51 and, on the 1901 figures, 21·97 per mille. This is nearer the mark, but is still, in all probability, rather too low. In 1900 the births in the area in question exceeded the deaths by 48,469, an increase equivalent to ·80 per cent. of the population at the 1901 census. I doubt whether the natural rate of increase for the year was in reality quite as low as this percentage would indicate. The decennial rate of increase in England and Wales between 1881 and 1891 was 11·65 per cent., and the preliminary figures for the 1901 census of the United Kingdom show for England and Wales a decennial rate of increase of 12·17, or an annual one of 1·1 per cent. between the years 1891 and 1901. In Germany the rate of increase between 1890 and 1895 was 1·12 per cent. per annum. I am inclined to think that, even if it does not exceed 1 per cent., the natural annual rate of increase in Lower Burma is nearer that figure than from the vital statistics available it would appear to be. For reasons which are given in the next paragraph, I think that it is probably above 1 per cent.

The social factors.

35. Poor as are the materials for calculating the effect of the natural factors of increase or decrease, those for gauging the working of the social factors are almost as meagre, for there is practically nothing in the shape of a systematic collection of statistics relating to immigration into and emigration from the province which could be made use of for purposes of reference. Mr. Tilly, Chief Collector of Customs, has kindly furnished me with a statement showing immigration into and emigration out of the Port of Rangoon during the past ten years, from which it appears that between March 1891 and February 1901 a total of 1,092,762 immigrants and 813,554 emigrants were registered at the Port, and that there was thus an excess of immigrants over emigrants amounting in all to 279,208. These figures represent of course only a portion of the immigration and emigration of the country, but are useful as indicating fairly well a minimum below which the figures of net immigration, calculated on other data, ought not to fall. The only satisfactory material we have for analysing the social increase is contained for the most part in Imperial Table No. XI, which deals with the birth-places of the people censused in Burma in March 1901. Of the total population of Lower Burma at the 1901 census 764,683 persons were returned as having been born beyond the limits of that area, as compared with 643,176 outsiders shown as such in the figures for the preceding census. This is practically the only indication we have of the extent to which the population of the Southern Districts has been swelled by immigration, and it must be confessed that it does not carry us very far. We know that there were in Lower Burma at the end of the decade under review 121,592 more non-indigenous folk than at its commencement, but the figures tell us nothing of how emigration and immigration fluctuated during the ten years in question, so that in one respect our conception of the working of the social is even more shadowy than that of the operation of the natural factors. Such as they are, however, the totals may be regarded as instructive. Having arrived at our aggregate of non-indigenous increase for Lower Burma, it will be of interest to note how much of it represents immigration from outside the limits of the province and how much immigration from within those limits, *i.e.*, from Upper Burma, the Shan States, &c. Looking at the population of the province as a whole, the two classes of migration bear a very different aspect, for it is an increment from outside Burma only that can be looked upon as a net provincial gain. Of the 643,176 persons born outside, but enumerated within, Lower Burma in 1891, a total of 270,759 had been born in India, Europe and other places outside Burma, while the balance, 372,417, claimed Upper Burma, the Shan States and the Chin Hills as their birth-place. In 1901 the "foreign" born population numbered 398,711 and the Upper Burma, Shan and Chin-born 365,972, so that we may take it that the immigrant population of Lower Burma has been reinforced to the extent of 121,507 souls during the ten years under review, and may regard 127,952 as indicating roughly the total for which immigration from outside the limits of the province is responsible. I shall not, I think, be far from the mark if I say in general terms that in Lower Burma 88 per cent. of the increase in the population during the past decade is due to the excess of births over deaths, and 13 per cent. to immigration from India and elsewhere beyond the provincial limits. The decrease in the total of the Upper Burma, Shan and

Chin-born population accounts for the excess of about 1 per cent. This would mean that the rate of natural increase in Lower Burma during the decennium was 1·5 per cent. per annum.

36. In Upper Burma we have practically no birth and death figures to help us in our calculations. The returns show, however, that, whereas in 1891 of the total population enumerated within the limits of Upper Burma proper, 73,868 persons had been born outside those limits and 55,580 beyond the limits of the province as a whole, the corresponding figures for 1901 were 114,396 and 76,601. We shall, in these circumstances, be justified in setting down the increase to the population of Upper Burma due to foreign immigration at a total of 21,021. This represents 3·8 per cent. of the total increase that has taken place in that area within the last 10 years. The increase due from migration from other portions of the province is thus 19,507, or 3·6 per cent., and natural causes account for the balance of 92·6 per cent. The above calculations ignore the natural increase that has been going on among the foreign-born population in Upper Burma during the decennium under consideration, but, as they stand, the figures will give a general idea of the relative strength of the different factors that have brought about an increase of the population since 1891.

Increases and decreases by districts.

37. Let us now consider how the total provincial increase has been distributed over the districts of Upper and Lower Burma. Subsidiary Table No. IIA. and the District diagram appended to this Chapter show that, with the exception of Prome and Thayetmyo, where there is a falling off in population of 3,173 and 10,455 souls, all the districts in Lower Burma have partaken of the numerical growth, but in very varying degrees. The inhabitants of the Kyaukpyu district are only three per cent. more numerous than they were 10 years ago; on the other hand those of the Myaungmya district have multiplied to the extent of 46 per cent. Thôngwa follows close on Myaungmya with an increase of 45 per cent. In the Pegu district the percentage of growth is 43 per cent. The reason for the very substantial rise in the last three districts is not far to seek. There is no necessity to look beyond their fertile paddy plains to see where their attraction for the immigrant lies. It is the influx of cultivators, desirous of opening up the rich wastelands of the delta, that has sent up the population totals; the "natural" factors alluded to above have had but little hand in the work. "Large areas, which 10 years ago were forest," says the Deputy Commissioner of Pegu, "are now under cultivation." Immigration, the Deputy Commissioner of Myaungmya tells us, has sent the population of the Wakèma township up by 64 per cent. The strangers come to a great extent from Madras and other portions of India, but to a certain extent also from the less favoured regions of Upper and also of Lower Burma. The high rate of increase in these three districts is not a thing of recent creation. During the preceding decade the growth was generally as high in the delta as in the 10 years under review. In fact in the old Thôngwa district the percentage of increase between 1881 and 1891 was 57 per cent., so that we may infer that the high-water mark of immigration in this quarter of the province has by now in all probability been reached. Next to Pegu in growth of population comes, curiously enough, Northern Arakan, with an increase of no less than 41 per cent. Here, however, we must recognize the operation of special causes. There may have been immigration during the ten years 1891-1900, the death-rate may have fallen and the birth-rate risen, but the Deputy Commissioner himself admits that the increase is more apparent than real and is due in the main not to these factors, but merely to improved enumeration. After Northern Arakan there is a drop in the percentage of growth. Toungoo shows the next highest figure (32 per cent.) for which immigration from Upper Burma seems to be mainly responsible, and next comes Rangoon Town with 30 per cent. Hanthawaddy and Henzada, the two most densely populated districts of the province, exhibit increases of 22 and 11 per cent. only, thus showing that the limit of their capacity for supporting a growing population has almost been reached. Bassein district has the same figure as Hanthawaddy. We learn from the Deputy Commissioner of Bassein that this district "is not now considered by the Upper Burman to offer him the same chances as

Lower Burma.

the new land now opening out in Myaungmya and Thôngwa." Taken on the whole of Lower Burma the average of increase is 21 per cent. With the exception of Northern Arakan, where the data are no real gauge of growth, all the districts of the Arakan division fall below this figure and, in spite of the Pegu district, the Pegu divisional average too is smaller. Kyaukpyu, Henzada, and Akyab show the three smallest increases in Lower Burma; Prome and Thayetmyo, as I have already stated, the sole decreases. Mr. Cooke, Deputy Commissioner of Kyaukpyu, says of his district: "There is no emigration or immigration to speak of * * * during the time of harvest large numbers of men go to the Akyab and Bassein districts, but these also return home as soon as the crop is cut." According to the vital statistics the population of Kyaukpyu should have been 5,015 higher in 1901 than in 1891. The census showed that the actual increase was exactly 20 less than this estimate. The exodus of reapers is no doubt more or less responsible for this difference, but Mr. Cooke is further of opinion that an enormous number of the deaths that took place during the cholera epidemic of 1894 never figured in the vital statistic returns. In Prome the actual falling off in population amounted to 3,173, or a decrease of 0·86 on the 1891 figures. The greater part of this is accounted for by a diminution of 2,647 in the number of the inhabitants of Prome town, which will be referred to later. There is no doubt that large numbers of the cultivators from the district have moved southwards, either permanently or temporarily, to swell the totals of the delta villages. Similar causes have no doubt operated in Thayetmyo, which shows a decline of 10,455 in population and a strength of four per cent. below the total for 1891.

Upper Burma districts.

In Upper Burma one would not ordinarily be led to look for any such increases as the delta districts display, and it is therefore with some little surprise that one notes rises of no less than 157, 95 and 90 per cent. in the populations of the Ruby Mines, Katha, and Bhamo districts respectively. Examination, however, will show thatthe actual growth of population in these districts is not commensurate with these figures. In 1891 the inhabitants of Möngmit were not, while in 1901 they were, reckoned among the population of the Ruby Mines, while portions of the Bhamo district which at the recent enumeration came within the scope of the operations had similarly been omitted ten years earlier. This non-enumeration of the wilder Kachin tracts, coupled with the disturbances in Katha and the Upper Chindwin, which coincided with the census and hampered its efficiency, are sufficient to account for what, in view of the percentages elsewhere, seem somewhat abnormal increases of 32 per cent. and 39 per cent. in the districts of Myitkyina and the Upper Chindwin. Exclusive of these five districts, where conditions are abnormal, the average rate of increase for Upper Burma is 11·2 per cent. Mandalay district alone of all shows a decrease during the decade. It is, however, one of two per cent. only. The fall in the district figures as a whole is largely accounted for by a drop in the population of Mandalay city which will be touched upon hereafter. It is clear, however, that the country as well as the townspeople show signs of quitting the district. The Deputy Commissioner has assigned no cause for this rural defection, but there can, I think, be no question that it must be accounted for by the fact that the presence of the Burmese Court in Mandalay gave an artificial stimulus to immigration not only into the city itself but also into its environs, and that since the withdrawal of that radiant centre of interest the cultivators have gradually realized the sentimental nature of their attachment to the soil and have drifted elsewhere where conditions are intrinsically more favourable. It is possible that the construction of the Mandalay canal may recall a large proportion of these wanderers to their ancient seats and tend to re-establish the *status quo ante*. The inhabitants of the Myingyan district are only one per cent. more numerous now than they were ten years ago. In his district report Mr. Parlett adverts to the different causes which might have been expected to bring about this state of things, which at first sight suggests stagnation. "Emigration and immigration in Myingyan" he says "follow the barometer. It has long been an established custom in this district to migrate when scarcity threatens, and to return when the rains promise a livelihood." It is doubtless the threatenings of scarcity in the past that has thus arrested the normal growth of the people, and it occurs to me as conceivable that the reason why

the readjustment of population after the lean years is slower in Myingyan than in the neighbouring districts of Meiktila and Yamèthin and in Shwebo—areas also liable to scarcity—is that until quite recently Myingyan has not, like these other three districts, been traversed by a railway. Time will show whether the new branch line from Thazi to Myingyan will facilitate and expedite the ebb and flow that are bound to ensue on a failure of crops and a hint of famine. The percentages of increase for the remaining districts of Upper Burma call for very little comment After Myingyan, Minbu, with a rise of 8 per cent. shows the slowest growth in population. Of what I would call the normal districts, Shwebo shows the highest increase, one of 24 per cent. The rest closely approximate to the provincial average.

Variations in the urban population, Lower Burma.

38. Imperial Table No. IV gives a list of towns classified by population, with variations from 1872 to1901. Data for the first named year are not in every case available, but the statement shows that of the towns where all the figures are procurable there are in Lower Burma five, Prome, Shwedaung, Pantanaw, Kyangin and Shwegyin, which have a smaller population now than thirty years ago. All five show a decline during the last decade and the falling off in all, except Pantanaw, began more than twenty years ago. It is noticeable, however, that Pantanaw was the only town of the five where there were no signs of recuperation during the 10 years 1881 to 1891. It seems probable that, but for the annexation of Upper Burma Prome would have been raised by the railway to its former state of prosperity. As it is, the same causes seem now to be at work as reduced its population during the years 1872—1881 from 31,157 to 28,813, and there seems to be no immediate prospect of its recovery, though the Deputy Commissioner hopes for better things, putting the decrease down largely to deficient rainfall and cholera. Similarly there is little likelihood of a revival in Shwegyin, for the abolition of the district was as much the effect of the decline in prosperity and the consequent depopulation as its cause. The numerical falling off in Kyangin is attributed by the Municipal President to the people "being unable to maintain themselves in the town." Emigration here seems to have taken place both to Upper and Lower Burma. In Pantanaw the decrease is due to the silting up of the river. Akyab, Kyaukpyu, Yandoon, Toungoo and Thayetmyo, though they show a net increase since 1872, have gone down in the matter of population since the last census. In Akyab the plague segregation rules and the comparatively poor paddy season were responsible for a smaller immigration of coolies than usual at the time of the census. There is nothing to show that the resident population is leaving the town. In Yandoon it would appear to be otherwise. The decrease of 7,456 is not commented on in the Deputy Commissioner's report, but it seems probable that it is due to a certain extent to encroachments by the river, which have compelled numbers of the residents to move elsewhere. However that may be, the population which, according to Mr. Eales' estimate, should by now have been 32,309 in the ordinary, course was 12,779 only. Toungoo has lost its military population since 1891, and a considerable section of its inhabitants appear to have been diverted on the census night to a pagoda festival a few miles out of the town. I do not think that the reduction from 19,232 to 15,837 need be looked upon as serious. Toungoo increased enormously during the nine years 1872—1881 and it would be too much to expect it to maintain the same rate permanently. It has still over five thousand inhabitants more than it had thirty years ago. In Thayetmyo the decrease of 1,277 since the last census is practically counterbalanced by an increase of 1,195 in Allanmyo, on the opposite bank of the river. The falling off in population noticeable in Kyaukpyu is insignificant. All the remaining Lower Burma towns show an increase. In some the growth of population during the last decade has been very marked. In Thatôn the total has risen by 4,659 souls, in Henzada by 4,994, in Thônzè by 4,321, in Letpadan by 6,621 and in Tavoy by 7,272. It is possible that the construction of the Bassein railway has added temporarily to the Letpadan figures. As regards Tavoy, the Deputy Commissioner writes :—

"The figures point to an influx of population in the town from the district, the increase of population in the town being far larger in comparison than the increase in the district."

The inhabitants of Rangoon number 54,557 more than in 1891, while Bassein and Moulmein have risen by 1,687 and 2,661 respectively. Moulmein has of all the towns specified most nearly fulfilled the expectations embodied in the forecast of population given by my predecessor in paragraph 37 of the 1891 Report, in other words its rate of progress during the last decade has been to all intents and purposes identical with that of the period 1881—1891. Ten years ago Mr. Eales calculated that in 1901 it would number 58,598 inhabitants. The actual figure was 58,446. The "Statement showing probable population of the towns of Lower Burma in 1901" is interesting as showing that in not one of the towns in the Pegu division chosen for illustration has the rate of progress been as great during the last decade as during the preceding one, and that only in three of the specified towns (Henzada, Myanaung and Tavoy) has the latter rate been exceeded to an appreciable extent. In thirteen out of the seventeen instances the actuals are below the estimate. The list does not, however, comprise Thatôn, Letpadan and Thônzè.

Variations in the urban population, Upper Burma.

39. It is impossible to peruse that portion of Imperial Table No. IV which deals with Upper Burma, without being struck by the large number of towns which are less populous now than they were at the last census. Of the nineteen Upper Burma urban areas dealt with in that table no less than twelve show a falling off during the past decade, and only in the case of Bhamo, Meiktila and Yamèthin does such increase as is apparent form any relatively large proportion of the people of the town. The population of Mandalay has diminished since 1891 by one short of five thousand souls. Major Strickland, the Deputy Commissioner, would throw the responsibility for this falling off largely on the reduction of the garrison and doubtless this is the explanation of a good deal of the decrease. It cannot, however, be of all. There is, apart from the diminution in the figures for the Cantonment and Shore, a reduction in those for the municipal area which is proportionately greater than that in the military portion of the city, and can only be accounted for by the operation of some such causes as in my opinion has brought about the diminution in the Mandalay district as a whole. The glamour of the court has vanished and the seductions of trade have failed to take its place. As an industrial centre Mandalay has not been altogether a success, and, unless its economic conditions alter considerably, there seems to be no immediate prospect of its regaining its lost thousands. In Myingyan town there has been a decrease of 3,651 since 1891. Scarcity is no doubt one of the factors, but the shifting of the bed of the river which has resulted in the bazaar being cut off from the steamer-ghât for several months of the year by a vast expanse of sand has probably done even more to damage the prospects of the town. It is to be hoped that the arrival of the railway will counteract the evil effects of the Irrawaddy's vagaries. Salin shows 2,388 fewer residents than in 1891, when the population numbered 10,345. On the head of emigration and immigration Mr. Pratt, the Deputy Commissioner, says :—

"There appears to have been a movement of agricultural labourers from Salin township to Lower Burma and a tendency to settle there permanently, but the data on this point are inadequate and I am unable to give any detailed information."

It is to be presumed that these causes operated in the urban as well as in the rural areas of the township. In addition to the above, Minbu, Yenangyaung, Kyauksè, Amarapura, Shwebo and Pagan show a falling off of over one thousand persons each. Except in the case of Kyauksè, no explanation has been given by the District Officers concerned of these decreases. With regard to the last-named town Major Cronin writes :—

"A noticeable decrease in the population of the town of Kyauksè that has occurred in 1901, as compared with the figures of the last census, is due to a considerable portion of the poorer classes having moved just outside the municipal boundaries owing to their being unable to build suitable dwelling-houses and pay municipal taxes."

This affords, no doubt, a clue to the secret of the other decreases alluded to. There are substantial increases in Bhamo, Meiktila and Yamèthin. The railway may be put down as operating in the case of the last two towns. Commercial

activity and immigration from the Chinese Shan States appear to have brought about the rise in the population of Bhamo.

Extent of foreign immigration in the various districts.

40. If it is desired to obtain a comprehensive view of the relative indebtedness of the different districts of the province to foreign countries for their population, reference should be made to Subsidiary Table No. II B, appended to this Chapter, which indicates how many people in each ten thousand of the population of each district were born within the limits of the province and how many outside those limits, whether in India or elsewhere. Rangoon naturally shows the highest proportion of Indian immigrants. A trifle over half its inhabitants are foreigners of this class. Akyab has the next highest figure, 1,531 Indians (for the most part Bengalis) in each 10,000 of its population. Hanthawaddy has 903 and Amherst 850 out of a similar total. The districts with the largest proportions of inhabitants born in Asia beyond India are Myitkyina and Bhamo (638 and 524, respectively, in each 10,000 of the population). These Asian immigrants are from China and the Northern regions beyond our administrative border. Next to these two districts, in point of numbers, come the Ruby Mines, and then follows Rangoon, with 382 non-Indian Asians in every 10,000 citizens. These are presumably mostly Chinamen. Malays, Siamese and Chinese form the bulk of the 349 Asian-born foreigners who figure in every 10,000 of the Mergui district. Elsewhere, except in the case of the Northern Shan States and Amherst the proportion of persons born in Asia beyond India is less than 1 per cent. of the total population. The column in Subsidiary Table No. II B headed "Born in other Continents" may be said practically to indicate the distribution of the European population over the province, and the fact that, after Rangoon and Mandalay city the districts showing the highest ratios per 10,000 of the population are Shwebo (26) and Thayetmyo (13) is significant of the share borne by British troops in the total European population of the province. The mercantile community of Moulmein places Amherst next in order of strength, but after Amherst come the Military districts of Bhamo and Meiktila. In the province, as a whole, 458 persons in every 10,000, that is to say 4·5 per cent. of the total population entered in the schedules on the 1st March 1901, claimed countries other than Burma as their birth-place. In 1891 the number of foreign-born in each 10,000 of the population was 429. The difference (29) is no real measure, however, of the growth of the foreign population during the decade, for in 1891 the Chin Hills were not at all, and the Shan States only partially, represented in the returns.

Movement from rural to urban areas.

41. The figures relating to towns given above settle one question incontestably. We are at any rate not at present faced with a problem that is agitating economists in England and doubtless in other European countries, namely, how best to cope with the tendency of the rural population to gravitate in undue numbers into urban areas. In Tavoy there seems to have been a movement of this nature, but Tavoy is a significant exception to the general rule. The Burman, fond as he is of gaiety and the amenities of city life, is quite incapable of responding to the calls that it makes upon his energies. In industrial matters he finds it hopeless to compete with the Native of India or the Chinaman and, though precluded by no caste prejudices from taking up fresh occupations, soon learns that it is in the non-industrial pursuits of the country that he can best hold his own. The following table showing the increases or decreases, as the case may be, among the Buddhists, the Hindus and the Musalmans in six of the largest commercial centres in the province, will demonstrate how little the indigenous races are responsible for any growth in population that may have taken place in the larger towns of Burma during the decade under review. We shall here be proceeding on the assumptions, firstly that Buddhism is the sole religion of the provincials and next that none but the indigenous profess it. Neither assumption is, strictly speaking, correct but, for the purposes of a comparison such as it is here desired to give, the non-Buddhistic people of Burma may be treated as a negligeable quantity, while the fact that many foreigners (such as Chinese) are to be included among the Buddhists only serves to emphasize the point which it is desired to establish.

	Buddhists.		Hindus.		Musalmans.	
	1891.	1901.	1891.	1901.	1891.	1901.
Rangoon ...	79,857	83,631	57,845	82,994	28,836	43,012
Moulmein ...	28,427	27,551	15,094	19,081	9,039	8,544
Bassein ...	19,908	19,982	5,415	7,181	3,621	3,651
Akyab ..	14,291	12,249	6,460	8,340	16,223	14,225
Prome ..	27,052	24,232	1,235	1,381	1,341	1,367
Mandalay ...	160,574	152,201	7,892	9,888	15,514	16,215

In four out of the six cases cited there are now actually fewer Buddhists inhabiting the urban area than there were when the last census was taken. In the other two cases (those of Rangoon and Bassein) the increases among Buddhists are relatively small and quite out of proportion to those exhibited by the representatives of the exotic religions. In Rangoon the Hindus and Musalmans are nearly half as numerous again as they were ten years ago while the Buddhists have not even a five per cent. increase to show. In Bassein the Buddhist increase for the decennium is less than 1 per cent. while the Hindus are more than one-third as strong again as in 1891. In Prome, though the population as a whole has fallen, it is not clearly not the Hindus or Musalmans who have been forsaking the town. They have been gaining steadily in numbers while the Buddhists have been going down. In Moulmein the Buddhists have diminished by nearly a thousand during the decade that is just over and though the Musalmans have followed suit, the Hindus have a substantial increase to show. The above few facts and figures will, I think, be sufficient to show that much water must flow under the bridge before the swarming of the indigenous population of the country into the large towns can become a source of uneasiness to our administrators.

Persons born in Burma but censused in India.

42. Subsidiary Table No. II C appended to this chapter shows the total number of persons born in Burma who were enumerated in the other provinces of India on the night of the 1st March 1901. The total of males and females is 7,624 as compared with 6,236 at the 1891 census. No details are available to show how many of these persons were the off-spring of parents temporarily resident in Burma who have since returned to their native country or what proportion the involuntary emigrants—to wit Burmese convicts transferred to Indian jails—bore to the whole, but it is probable that these two classes form the bulk of the total. In any case, however, the figures are small. The Burman is notoriously not given to migration from his country of birth and data regarding his tendency to move outside the limits of the province are of no particular statistical value.

SUBSIDIARY TABLE NO. II-A.

Variation in Population by Districts.

Natural divisions, districts, and cities.	PERCENTAGE OF VARIATION; INCREASE (+) OR DECREASE (—).			Net variation in period 1872 to 1901. Increase (+) or decrease (—).
	1891 to 1901.	1881 to 1891.	1872 to 1881.	
1	2	3	4	5
1. Ruby Mines	+ 157	...	...	...
2. Katha	+ 95	...	...	...
3. Bhamo	+ 90	...	...	...
4. Upper Chindwin ...	+ 39	...	...	...
5. Myitkyina	+ 32	...	...	...
UPPER BURMA, WET.	+ 72	...	...	...
1. Shwebo	+ 24	...	...	...
2. Yamèthin	+ 18	...	...	...
3. Lower Chindwin ...	+ 18	...	...	...
4. Meiktila	+ 16	...	...	...
5. Sagaing	+ 15	...	...	...
6. Pakôkku	+ 14	...	...	...
7. Magwe	+ 13	...	...	...
8. Kyauksè	+ 12	...	...	...
9. Minbu	+ 8	...	...	...
10. Myingyan	+ 1	...	...	...
11. Mandalay (rural) ...	— 2	...	..	...
UPPER BURMA, DRY.	+ 12	...	...	...
1. Myaungmya	+ 46	+ 70	+ 70	+ 321
2. Thôngwa	+ 45	+ 42	+ 58	+ 225
3. Pegu	+ 43	+ 29	+ 67	+ 206
4. Northern Arakan ...	+ 41	+ 1	+ 65	+ 135
5. Amherst	+ 29	+ 29	+ 39	+ 131
6. Thatôn	+ 29	+ 16	+ 39	+ 108
7. Hanthawaddy	+ 22	+ 34	+ 58	+ 159
8. Bassein	+ 22	+ 20	+ 32	+ 93
9. Mergui	+ 20	+ 30	+ 20	+ 88
10. Salween	+ 20	+ 5	+ 15	+ 45
11. Akyab	+ 16	+ 16	+ 30	+ 74
12. Sandoway	+ 16	+ 20	+ 18	+ 64
13. Tavoy	+ 16	+ 12	+ 18	+ 53
14. Kyaukpyu	+ 3	+ 10	+ 4	+ 17
LOWER BURMA, LITTORAL.	+ 27	+ 25	+ 39	+ 121
1. Toungoo	+ 32	+ 11	+ 39	+ 104
2. Tharrawaddy	+ 17	+ 25	+ 59	+ 131
3. Henzada	+ 11	+ 20	+ 42	+ 89
4. Prome	— 1	+ 12	+ 17	+ 31
5. Thayetmyo	— 4	+ 48	+ 8	+ 53
LOWER BURMA, SUB-DELTAIC.	+ 11	+ 21	+ 32	+ 76
1. Rangoon city	+ 30	+ 34	+ 36	+ 138
2. Mandalay city	— 3	...	...	...
BURMA (WHOLE).	+ 20	...	...	...

SUBSIDIARY TABLE NO. II-B.

Immigration per 10,000 of Population.

District, State or City of enumeration.	PROPORTION PER 10,000.					Percentage of immigrants from outside Burma to total population.
	Born in Burma.	*Born outside Burma.*				
		Born in India.	Born in Asia beyond India.	Born in other Continents.	Birth-place (out of Burma) not ascertained.	
1. Bhamo ...	8,941	528	524	6	1	10·5
2. Myitkyina ...	8,742	616	638	3	1	12·5
3. Katha ...	9,882	100	17	1	...	1·7
4. Ruby Mines ...	9,268	232	495	4	1	7·3
5. Upper Chindwin...	9,840	147	11	2	...	1·5
6. Northern Shan States.	9,721	157	121	1	...	2·7
7. Southern Shan States.	9,968	29	3	...	...	0·32
8. Chin Hills ...	9,808	152	40	...	...	1·9
UPPER BURMA, WET ...	9,780	125	94	1	...	2·19
1. Pakôkku ...	9,950	45	4	1	...	0·5
2. Minbu ...	9,931	60	8	1	...	0·6
3. Magwe ...	9,947	49	3	1	...	0·5
4. Mandalay (rural)	9,741	184	72	3	...	2·5
5. Shwebo ...	9,877	91	6	26	...	1·2
6. Sagaing ...	9,950	47	2	1	...	0·4
7. Lower Chindwin...	9,937	60	3	...	...	0·6
8. Kyauksè ...	9,906	85	8	1	...	0·9
9. Meiktila ...	9,883	107	5	5	...	1·1
10. Yamèthin ...	9,846	137	15	2	...	1·5
11. Myingyan ...	9,960	33	6	1	...	0·4
UPPER BURMA, DRY ...	9,910	76	10	4	...	0·8
1. Akyab ...	8,457	1,531	8	4	...	15·4
2. Northern Arakan	9,754	182	64	...	...	2·5
3. Kyaukpyu ...	9,920	70	10	...	...	0·7
4. Sandoway ...	9,880	113	5	2	...	1·1
5. Hanthawaddy ...	9,028	903	66	3	...	9·7
6. Pegu ...	9,375	561	63	1	...	6·2
7. Bassein ...	9,582	381	33	4	...	4·1
8. Myaungmya ...	9,795	160	44	1	...	2·0
9. Thôngwa ...	9,621	317	61	1	...	3·7
10. Salween ...	9,902	81	16	1	...	0·9
11. Thatôn ...	9,537	403	59	1	...	4·6
12. Amherst ...	9,026	850	117	7	...	9·7
13. Tavoy ...	9,909	66	24	1	...	0·9
14. Mergui ...	9,538	112	349	1	...	4·6
LOWER BURMA, LITTORAL.	9,350	592	56	2	...	6·5
1. Tharrawaddy ...	9,724	245	30	1	...	2·7
2. Prome ...	9,890	95	15	...	...	1·0
3. Henzada ...	9,884	99	16	1	...	1·1
4. Toungoo ...	9,723	237	37	3	...	2·7
5. Thayetmyo ...	9,836	145	6	13	...	1·6
LOWER BURMA, SUBDELTAIC.	9,817	159	21	3	...	1·8
1. Rangoon city ...	4,485	5,012	382	117	4	55·1
2. Mandalay city ...	9,229	653	50	68	...	7·7
BURMA, WHOLE ...	9,542	401	51	6	...	4·5

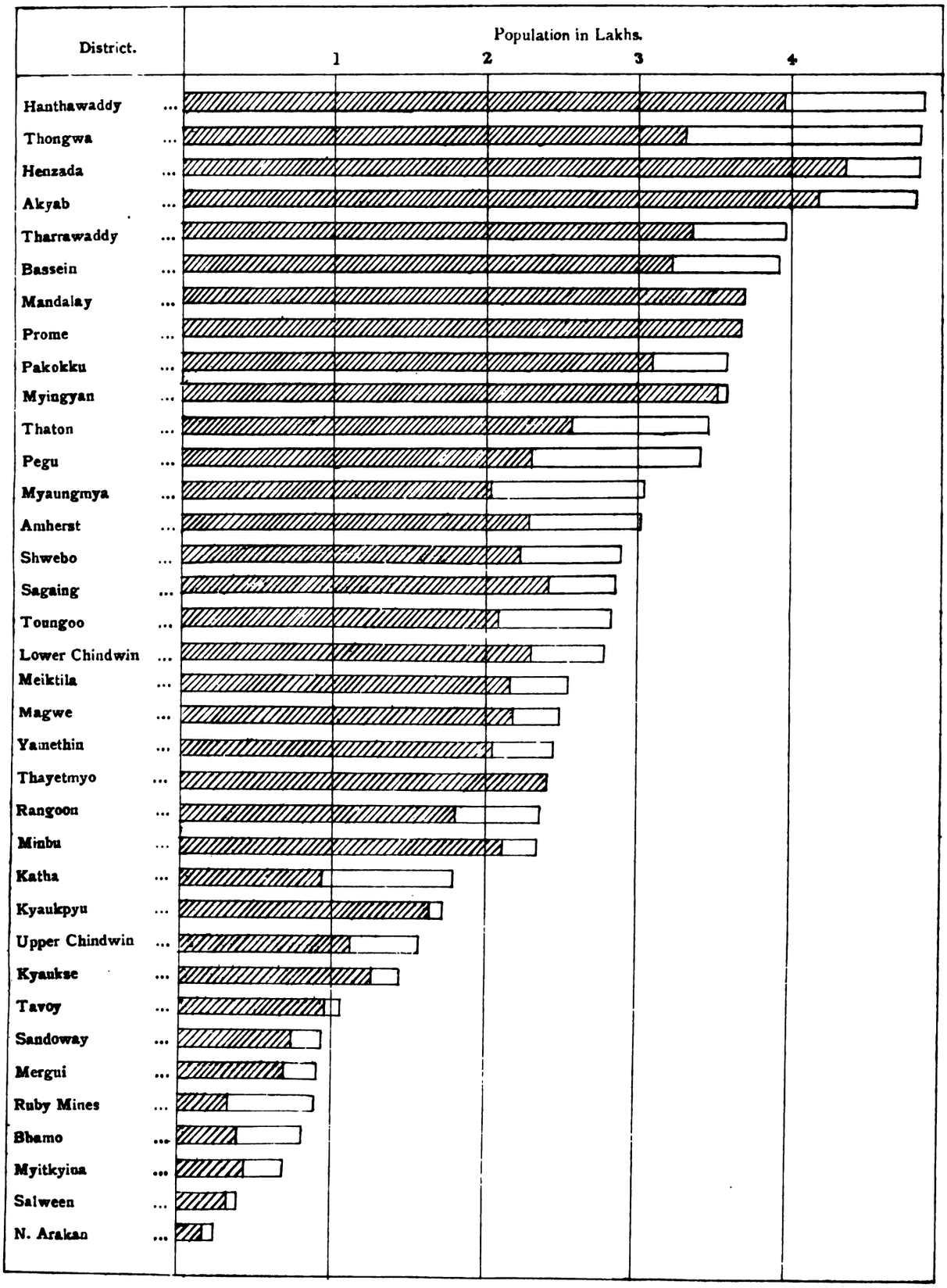
SUBSIDIARY TABLE NO. II-C.

Return of Burmese Emigrants enumerated in other Provinces.

Province or State.	Persons.	Males.	Females.
Aden	7	5	2
Ajmer Merwara	10	6	4
Andamans and Nicobars	1,981	1,966	15
Assam	161	104	57
Baluchistan (British)	23	8	15
Baroda	25	18	7
Bengal	1,669	1,130	539
Berar	4	1	3
Bombay	288	176	112
Central Provinces	315	214	101
Cochin	1	1	...
Coorg	11	4	7
Gwalior	4	4	...
Madras	1,502	865	637
North-Western Provinces and Oudh	794	611	183
Punjab	802	423	379
Rajputana	27	18	9
Total ...	7,624	5,554	2,070

CENSUS 1901.

GROWTH OF POPULATION BY DISTRICTS SINCE 1891.



THE total length of each bar represents the aggregate population of the district in 1901, while the shaded portion of the bar indicates the strength of the population in 1891.

In Mandalay, Prome and Thayetmyo there have been slight decreases since 1891.

No. 6, SUPT. CENSUS 2-4-02—1210.

CHAPTER III.

THE RELIGIONS OF THE PEOPLE.

Buddhism.

43. Of the religions of the Province Buddhism has by far the largest number of professed adherents. On the 1st March 1901 there were 9,184,121 persons who had returned themselves at the Census or had been returned by the heads of their households as Buddhists, so that we may take it that 88·6 *per cent.* of the population of the province, including the Shan States and the Chin Hills, has nominally, at any rate, embraced the teachings of Gautama. The total of Buddhists shown at the preceding Census was 6,888,250, but this is practically the return for Burma proper only, for the Buddhist population outside the limits of the eight formally administered divisions was then a meagre 175. For Burma proper the total for the recent Census was 8,223,071, a figure which enables a far truer estimate to be obtained of the strength of Buddhism at the beginning and at the end of the decade.

Subsidiary Table No. III-A appended to this chapter (General distribution of Population by Religion) shows that the actual increase in the Buddhist population of Burma proper during the past ten years is one of 19 per cent., but that, whereas in 1891 in every ten thousand of the population 9,056 persons on an average professed the Buddhist faith, the proportion would now be found to be only 8,910, or 146 lower. For the whole of Burma the contrast of proportions can only be carried back to 1891. In Lower Burma, however, we can make a further comparison and can learn from Subsidiary Table No. III-B that during the ten years 1881—1891 the Buddhist population of Lower Burma increased by 24 per cent. For the following decade, the one with which we are immediately concerned, the Lower Burma figure of increase, is the same as that given above for Upper and Lower Burma combined (19 per cent.); that is to say, it is lower than the growth of the previous decennium. Let us contrast one more set of figures. In 1901 in Lower Burma 8,533 persons out of every ten thousand were Buddhists. In 1891 Buddhism numbered 8,680 adherents out of every ten thousand people and in 1881 no less than 8,702. We thus see in Lower Burma not only that Buddhism has not increased as rapidly as the other religions in the aggregate, but also that during the past twenty years its actual rate of growth has diminished. That its progress should not be marked by such leaps and bounds as is that of the immigrant religions is natural enough. Why in the decade 1881—1891 the Buddhists of Lower Burma should have increased by 24 per cent. and in the following ten years by only 19 per cent. is not so clear. The cause probably is the return to their homes during the first period of ten years of the Upper Burman Buddhists who, during the disturbances that followed on the annexation, sought a temporary asylum in the Lower Province, and for the time being swelled the ranks of Buddhism there. For the whole Province, including the Shan States and the Chin Hills, the proportion of Buddhists to every ten thousand of the population is 8,862.

Burmese Buddhism.

44. Of Buddhism as a whole this is not the place to write. All that need immediately concern us here are the main features of the faith as actually professed in the province, in other words, the practical working Buddhism of Burma. But first let us note that Burmese Buddhism, whatever it may now have become, was originally an amalgamation of the tenets of the two main schools of Buddhistic thought, the Northern and the Southern, which are more or less, though not exactly, connoted by the expressions *Mahâyâna* and *Hînâyâna.* In his *Studies in Eastern Religions* Mr. A. S. Geden says:

> "The Buddhism of Burma is therefore certainly composite, and its character is perhaps best explained in the light of a fusion of Northern and Southern elements which met and exercised a mutual influence in the valley of the Irawadi."

In his 1891 Report Mr. Eales discusses the two theories regarding the route by which Buddhism was introduced into Burma, and inclines to the view that it

found its way in by sea from Ceylon rather than to that which traces its passage down the valleys of the Irrawaddy and Chindwin from India. It appears that neither of these views is inconsistent with the actual facts as indicated (possibly with some fanciful imagery) in the ancient Burmese chronicles. The following note, which Mr. Taw Sein Kho has kindly written for me, not only brings out clearly the dual origin of Burmese Buddhism (a point to which, perhaps, sufficient prominence has not been given in the past) but also shows incidentally that the two component parts of the faith as professed in the province crossed its borders for the first time at different periods and from different points of the compass:

"There are two schools of Buddhism, the Northern and Southern. Sanskrit is the vehicle of the former and Pali of the latter. In the Northern school, which is still professed by Nepal, Bhutan, Thibet, Mongolia, Corea, China and Japan, the existence of a Supreme Being, the Creator of the Universe, called Adhi-Buddha, is recognized, while in the Southern school, which is now professed by Ceylon, Burma and Siam, the central tenet is that man, without any extraneous aid from any Superior Being, is capable of attaining Salvation, and that Buddha is the highest type of humanity. The adherents of the Northern school immigrated to Burma and settled down at Prome at the beginning of the Christian era. Some of the settlers came by sea, because Prome was then a sea-port, while others came possibly by land by way of Chittagong and Arakan or *viâ* Assam and Manipur. The Chindwin valley is full of ancient historic sites, and is redolent of traditions about Brahmanic kings similar to those prevailing at Prome. There were also Indian settlements at Yazagyo, Malè, Tagaung and Legaing. Later on, in the 8th and 9th centuries A.D., there was an upheaval of races in Central Asia and China, and ethnic pressure, due to the displacement of race by race, profoundly affected the destinies of both India and Burma. Further, the advent of Muhammadan rule into the valley of the Ganges destroyed Buddhism in Northern India, and the Northern school gradually lost its hold over Burma, because its life-blood had been cut off at its source. Meanwhile, the Buddhists of the Irrawaddy Valley had entered into relations with the *bonzis* * of Thibet and the Lamas of China, and the theistic character of the Northern school became tinged with Shamanistic beliefs and corrupt practices, of which the unchastity of the Aris of Pagan was the most prominent. When Nawrata became king of Pagan in the 11th century A.D., the prevailing religion had, indeed, reached a very low depth in its stages of decline and corruption.

* The Burmese word *póngyi* is undoubtedly derived from the Thibetan "Bonzi."

"Thatôn was the stronghold of the Southern school in Burma. Thither the monks of Ceylon repaired for the propagation of their faith. It is said that the *Theras*, Sona and Uttara, were sent as Buddhist Missionaries to Thatôn after the Third Council held by Asoka in 244 B.C. The truth of this statement rests on the correct identification of the term "Suvannabhumi," the *Aurea Regio* of Ptolemy, with the ancient Talaing kingdom of Thatôn. Be that as it may, Pagan is the place where the two schools of Buddhism coalesced under the auspices of Nawrata and his successors, and where the stronger vitality of the Southern school completely absorbed, assimilated and obliterated the Northern school."

Burmese Buddhist Sects.

45. An account is given in the 1891 Report of what may be called the High and Low Church parties in the Burmese Buddhist Church, the Sulagandis and the Mahagandis, to give them two of their many names. Mr. Taw Sein Kho says of them:

"The Buddhist sects remain as they were 10 years ago. The attitude of each sect towards the other is not conciliatory; at the same time it is not aggressive. A new sect has arisen called the (Kamatan, ကမ္မဋ္ဌာန်း). Its members believe that beatitude can be attained even in this life by means of austerity, self-control and ecstatic meditation."

Another sect not adverted to in the 1891 Report is that of the Mans. These are to be found in small numbers in portions of the Pegu and Tenasserim divisions, the scattered remnant of a body whose anti-clericalism appears to have created some sensation in Upper Burma rather less than half a century ago. Their tenets (which seem to be somewhat similar to those of the Sawti sect, referred to in the article on Nam Hkam in the *Upper Burma Gazetteer*) are described in the following note, for which I am again indebted to Mr. Taw Sein Kho:

"The sect was founded by Maung Po, a physician of King Mindôn, in 1856. All Buddhists must revere the "Three Gems," Buddha, Dhamma (Law) and Sangha (Assembly of Monks). Maung Po taught that the third "Gem" was a mere excrescence, and he repudiated the obligation of the laity to supply the monks with the four necessaries, namely, shelter, raiment, food and medicine. His principal doctrine is that man's salvation lies in his own hands, and that salvation can be attained if one has overcome the *Máras* (pronounced *man* in Burmese) as Gotama Buddha did.

"The *Máras* are—

(1) Khanda mâra or continued existence;
(2) Kilesa mâra or concupiscence;
(3) Maccu mâra or death;
(4) Abhisankhara mâra or Karma, the result of one's actions; and
(5) Devaputta mâra or the Tempter.

"For a time these heretical teachings spread like wildfire as their acceptance absolved the adherents of the sect from the obligation to support Buddhist Monks. The Burmese Government, which was an ardent follower of the maxim of the Unity of the Church and the State, became seriously alarmed. The King at once ordered the arrest and impalement of the founder, Maung Po, and his sect was proscribed in Upper Burma. One of his principal followers, Maung Ka, fled to Pegu, which then became the rallying point of the dispersed and persecuted adherents. Thence the doctrines spread to Shwegyin and Thabyegan in the Hanthawaddy district."

Power of the priesthood in Burma.

46. It is easy to understand that the attempt to inaugurate any form of Buddhism that did not afford a full measure of regard for the priesthood must, in Burma, have been foredoomed to failure. The Upper Burma Gazetter in the Chapter "Religion and its Semblances" shows that there are few phenomena more striking than the prominent part taken by the pôngyis of Upper Burma in the political life of the past century. Their influence over the people on the one hand and the Government on the other is as great as that exercised by any priesthood whose doings have found a place in the annals of ecclesiastical polity. They have been described as "holding the balance between the rulers and the ruled." So dominant a power were they in the land a score of years ago that when, with the annexation, the old order was changed and the priestly prestige was threatened by the new, which found no place for the monkish intermediary in its system, there were few more pertinacious and dogged opponents to the British rule in the new territory than the wearers of the yellow robe. Nor was it only in Upper Burma that the flame of revolt was fanned by the priesthood. In Tavoy, Tharrawaddy and Sandoway, districts of the Lower Province, the pôngyis fomented disaffection in the early post-annexation days. I should be the last to deny that, as a rule, the Burman ecclesiastic is the upright, clean living member of society he is said to be; what I do maintain is that, when he falls below the high level he usually maintains, he but seldom scruples to use to the very uttermost his very great powers for mischief. The latter days of early British dominion were days of anger, hatred and malice, and it is not to be wondered at that the heart of the Church militant burnt within it. We have seen the result. I think it may safely be said that, but for the monks, the pacification of the country would have been completed far earlier than was actually the case. Even as late as in 1897 a pôngyi was able to collect a handful of fanatical laymen around him and lead them to a hare-brained attack on the fort at Mandalay. All this active participation in things temporal is, as Sir George Scott points out, as little in keeping with the frigid precepts of the Great Law Giver as it would be with the pacific teachings of the Sermon on the Mount, and would not for a moment be countenanced by the laity but for the fact—now largely recognized—that the Buddhism of the people, whose spiritual guides the pôngyis are, is of the lips only, and that inwardly in their hearts the bulk of them are still swayed by the ingrained tendencies of their Shamanistic forefathers, in a word are, at bottom, animists, pure and simple.

Latent animism.

47. From a purely statistical point of view it is obviously immaterial whether the religion returned by the Burmans or any other body of persons is their real and not merely their nominal faith. A Census Report, however, must at times be critical as well as statistical in its scope, and it will not be without profit, before passing on to a consideration of the animistic religion, to form some conception of the extent to which spirit worship underlies the faith to which the greater number of people of Burma have given a professed adherence. The point is by no means new. It has been touched upon frequently before; it forms the text of some of the most instructive paragraphs of Mr. Eales' 1891 Census Report, but I doubt whether even yet sufficient stress has been laid upon it.

The phenomenon of a discredited but real belief existing for long periods obscured, but not stifled, by a formally superimposed creed is familiar enough to

observers. At no period of history has a nominal profession of faiths often far more exacting than the Buddhist been found incompatible with a genuine, if surreptitious, allegiance to the gods of an earlier age. Who shall say how many centuries after the introduction of Christianity the performance of old-time idolatrous rites was kept up in rural England, or how many conquered orientals have consented to bow down in the house of Rimmon since the Captain of the host of the King of Syria was told to go in peace. The difficulty with which idolatry dies, even where Islam has long been the nominal creed of the people, has often been the theme of Indian writers.* Among our Southern Mongolian neighbours the story is the same. Mr. Blagden, in his preface to Mr. Skeat's recently published *Malay Magic*, says—

"It is necessary to state that the Malays of the Peninsula are Sunni Muhamadans of the school of Shaf'i, and that nothing, theoretically speaking, could be more correct and orthodox (from the point of view of Islam) than the belief which they profess.

"But the beliefs which they actually hold are another matter altogether, and it must be admitted that the Muhamadan veneer, which covers their ancient superstitions, is very often of the thinnest description. The inconsistency in which this involves them is not, as a rule, realized by themselves. Beginning their invocations with the orthodox preface '*In the name of God, the Merciful, the Compassionate*' and ending them with an appeal to the creed '*There is no god, but God, and Muhammad is the apostle of God,*' they are conscious of no impropriety in addressing the intervening matter to a string of Hindu Divinities, Demons, Ghosts and Nature Spirits, with a few angels and prophets thrown in as the occasion may seem to require * * * There can be no doubt that the increasing diffusion of general education in the Peninsula is contributing to the growth of a stricter conception of Islam, which will involve the gradual suppression of such of these old world superstitions as are obviously of an unorthodox character. This process, however, will take several generations to accomplish."

If this is done in the green tree of Muhamadanism what can be expected in the dry, the tolerant, easy-going ethical system of Buddhism?

The whole spirit of compromise, in which rude uncultured minds regard new faiths that appeal more to the reason than to the instinct, that heritage of an immemorial past, is admirably described in a legend that the heathen Karen make use of to explain away the apparent inconsistency of their Animistic practices with their belief in an all-powerful Supreme Being. It is given in Mr. Smeaton's *Loyal Karens of Burma.* It relates how some children, left by their parents in a safe place out of the reach of beasts of prey, were, nevertheless, so frightened at the approach of a tiger that, to save themselves, they took some pigs that had been placed in the shelter with them and threw them down for the tiger to devour.

"Their eyes, however (so the story runs), were fixed, not on the tiger, but on the path by which they expected to see their father come. Their hands fed the tiger from fear, but their ears were eagerly listening for the twang of their father's bow-string which would send the arrow quivering into the tiger's heart. And so, say the Karens, although we have to make sacrifices to demons, our hearts are still true to God. We must throw sops to the foul demons who afflict us, but our hearts are ever looking for God.'

It is doubtful whether the great majority of Burmans would be prepared to make a frank as profession of the faith that was in them as Mr. Smeaton's Karens. For all that, however, their position as regards their religious beliefs is no less anomalous.

The whole matter has been summed up for us by Mr. Andrew Lang, who puts into words a clearly acknowledged truth when he says in his *Custom and Myth*: "What the religious instinct has once grasped it does not, as a rule, abandon but subordinates or disguises when it reaches higher ideas." In Burma, as elsewhere, the existence of spirits, kindly or malevolent, as the case may be, is the fact that has from time immemorial been laid hold of and assimilated by the religious instinct of the native, and this ingrained conception the Burman has refused to cast off with his acceptance of the loftier truths of Buddhism. He has disguised it, that is all; if, in truth, that can be called a disguise which is so unblushingly transparent. Nor is there any reason why it should be rejected. There is here no question of a jealous Jehovah, content with nothing less than whole-hearted devotion. Though it may not have been to fulfil that Buddha came, it was as-

* An interesting examp'e is quoted at page 168 of Mr. Baines' General Report on the 1891 Census.

suredly not to destroy. Nothing that does not run directly counter to the few positive precepts of the religion can be said to be proscribed. For the infidel and heretic the way of peace has no terrors. The Burman has added to his Animism just so much Buddhism as suits him and with infantile inconsequence draws solace from each in turn. I know of no better definition of the religion of the great bulk of the people of the province than that given by Mr. Eales in his 1891 Census Report, "a thin veneer of philosophy laid over the main structure of Shamanistic belief." The facts are here exactly expressed. Animism supplies the solid constituents that hold the faith together, Buddhism the superficial polish. Far be it from me to underrate the value of that philosophic veneer. It has done all that a polish can do to smooth, to beautify and to brighten, but to the end of time it will never be anything more than a polish. In the hour of great heart-searchings it is profitless as the Apostle's sounding brass. It is then that the Burman falls back upon his primæval beliefs. Let but the veneer be scratched, the crude animism that lurks below must out. Let but his inmost vital depths be touched, the Burman stands forth an Animist confessed. As the author of *The Soul of a People* says when commenting on and justifying the outward aspects of the faith of the people of Burma—

> "For the outsider judges a religion as he judges everything else in the world * * * . He looks to acts as proofs of beliefs, to lives as the ultimate effects of thoughts. And he finds out very quickly that the sacred books of a people can never be taken as showing more than approximately their real beliefs. Always through the embroidery of the new creed he will find the foundation of an older faith, of older faiths, perhaps, and, below these again, other beliefs that seem to be part of no system but to be the outcome of the great fear that is in the world."

Animism.

48. Of the population of the province a total of 399,390 persons only returned themselves as professed adherents of that faith to which practically the whole country really owes allegiance. In 1891 the grand total of Animists was 168,450, but of these only a single male represented the population outside the limits of Burma proper. In 1901 the spirit-worshippers of the Shan States and the Chin Hills figured for the first time in the returns. They numbered 161,882 and accounted for the greater part of the difference between the totals for the two Censuses. Subsidiary Tables Nos. IIIA and IIIB would appear to show one thing that the average reader would hardly expect; that is, that there were more than twice as many Animists in Lower as in Upper Burma at the recent Census, the totals being 158,552 and 78,956. The Upper Burma Religion total, however, it must be borne in mind, excludes the inhabitants of the estimated tracts, who, we may assume, were spirit-worshippers almost to a man. Had religion been returned in these areas we should in all probability have found that the Upper Burma Animsts exceeded a lakh in number; in other words, that they were about two-thirds of the strength of their co-religionists in the South. In Lower Burma the proportion of Animists to the total population of all religions is steadly dwindling. In 1881 it averaged 384 in every ten thousand souls; in 1891 only 320. The average has now fallen to 281. For all that there is not the actual decrease in the total of Nat-worshippers in Lower Burma which Mr. Eales anticipated in paragraph 59 of his 1891 Report. What dimunition there is is only relative. In Burma proper the proportion of Animists has risen since 1891 from 221 to 257 per ten thousand. This growth, which is more apparent than real, is accounted for by the inclusion within the scope of the operations of tracts mainly inhabited by spirit-worshippers which at the previous Census were not enumerated. For the whole of the province, including the Shan States and the Chin Hills, the proportion of Animists is now 385 in every ten thousand of the population. Spirit-worship thus ranks numerically second to Buddhism.

Animism and ancestor worship.

49. In Burma the Animist is ordinarily known as a "Nat-worshipper." The Chinese, with the exception of such as returned themselves definitely as Christians, Buddhists or Musalmans, have been included in this category. The Burmans have no specific term for the ancestor worship which forms the basis of the Chinese religions, and indeed in their essence Taoism and Confucianism differ but little from the national indeed in their essence Taoism and Confucianism differ but little from the national worship of the peolpe of Burma. The underlying idea of a spirit-world peopled

by inhabitants of like passions with ourselves, to be appeased, avoided, deceived or, if necessary, played off against one another, is more or less common to all. The fact whether the spirits are or are not ancestors is really immaterial. Nay, more, if Mr. Grant Allen is to be believed, all spirit-worship was originally ancestor worship.

"Whenever (he says in his *Evolution of the idea of God*) we go back to very primitive religions, we find all men's gods are the corpses or ghosts of their ancestors."

And again—

"Most often we can trace ghosts, spirits and gods to particular human origins. Where spirits exist in abundance and pervade all nature, I still fail to understand why they may not be referred to the one known source and spring of all ghostly beings. It is abundantly clear that no distinction of name or rite habitually demarcates those ubiquitous and uncertain spirits at large from those domestic gods whose origin is perfectly well remembered in the family circle. I make bold to believe, therefore, that in every such case we have to deal with unknown and generalized ghosts: with ghosts of most varying degrees of antiquity. If any one can show me a race of spirit-believers who do not worship their own ancestral spirits or can adduce any effective *prima differentia* between the spirit that was once a living man and the spirit that never was human at all, I will gladly hear him."

For my part I can certainly adduce no such effective *prima differentia* in the case of the spirit-worshippers of the province. So far as Burma and its surroundings are concerned, I should say that everything was in support of Mr. Grant Allen's theories.

Nat-worship in Burma.

50. It appears to be a moot point whether, to be precise, there are thirty-seven or thirty-four nats duly recognized as such by the Burmans. Sir George Scott inclines to the belief that there are thirty-seven, though only thirty-four occasions of worship. What is more certain is that the spirit known as Thagya Min occupies a peculiar position as the ruling monarch of Tawadeintha, the land of the Nats. His annual descent to earth marks the commencement of the Burmese New Year. One of the most interesting of the nats is the Mahagiri Nat Min, in whose honour a cocoanut is to this day hung in the house of every self-respecting Burman. Of these and other nats a list is given in the *Upper Burma Gazetteer,* showing their names and origin, humble or exalted. I doubt whether it would be possible to say definitely that any one of these was never a human being, whose memory was revered by his descendants, till after the lapse of years the fact that he had really lived on earth was lost sight of. All the professedly animistic races have nats of their own. Their name, like that of the devils of old, is legion. The Kachins look upon one Chinūn Way Shun as the primordial creator of the denizens of the spirit world, who, with the assistance of the subordinate nats whom he had called into existence, created out of a pumpkin a man-like thing, from whom the Kachin race is descended. Canonization is attended by no particular difficulties in the Kachin religion, for apparently it is possible for any one after death to be received into the exalted company of nats. The Sawngtūng Karens have the monopoly of a national spirit who is known as Lei and who resides on Loi Maw hill in the Shan States. A hill (that of Byingyi) is similarly the abode of the arch nat of the Banyang tribe of Karens. The Taungthu have both village and house nats who have to be constantly propitiated, and there can be no question, I think, that the house nats are the shades of early ancestors. The same is the case with the Taungyo. The spirit who presides over their harvesting is known as the Saba leip-bya and receives suitable offerings at the time of the crop-threshing. Among the Karens of Lower Burma the Ceres of the *taungya* is known as Pee Bee Yaw. There she is not a leip-bya, or butterfly, but assumes the more sombre guise of a cricket. Kozin is the spirit to whom the Hakas and some of the Southern Chins do reverence, with a view solely to averting evil. The Siyin Chins have no such Supreme Being. For them there is no world but this, and this world is at best the haunt of numberless evil spirits who must at all costs be propitiated. Dwopi, In Mai, Nokpi and Nalwun are the names of some of these malignant beings. Each has a particular scourge that he is able to inflict. One is the demon of madness, a second controls fever and ague, some can command a drought at will or sweep away the crops of a season in a storm of rain. Among the Chins of Lower Burma are

found traces of ancestor worship mixed with the ordinary spirit cult. Offerings are made by the Southern Chins to the Khun or founders of the various clans who are supposed to have an eye to the welfare of their descendants. These Chins, like the Burmans, have a Styx which after death they cross, though by a thread and not in a ferry boat. A being named Nga Thein appears to combine for them the offices of Charon and Rhadamanthus and a cauldron of boiling water is one of the principal features of their infernal regions. The Chins' hell has certain points in common with that of the Szi, but it is thought probable that the Szis' Inferno has been largely borrowed from their Burmese neighbours. The nats of the Palaungs are male and female and all of them have their names. The most powerful of these beings goes by the name of Ta Kalu. Like the Karen nats he favours one particular eminence.

Animism and head-hunting.

51. The most practical outcome of the spirit-worship of the wild Was is their head-hunting. In the opinion of the Wa the ghost of a dead man goes with his skull and hangs about its neighbourhood, and so many skulls posted up outside his village gate mean so many watch-dog *umbræ* attached to the village, jealous of their own preserves and intolerant of interlopers from the invisible world. Thus every addition to the collection of skulls is an additional safe-guard against ill-affected demons and a head-hunting expedition is undertaken not, as was once thought, from motives of cannibalism or revenge, but solely to secure the very latest thing in charms as a protection against the powers of darkness. It is interesting to note that the head-cutting season lasts through March and April, and that it is when the Wa hill fields are being got ready for planting that the roads in the vicinity become dangerous for the neighbouring Shans. In a word, the little that is known of the practice seems to hint at the fact that the victim selected was primarily a harvest victim. The whole question of the animistic basis of the ceremony is of the greatest interest, but it is impossible to do full justice to it here. I will merely quote a passage from Mr. Grant Allen's *Evolution of the Idea of God,* which, read in connection with Sir George Scott's account of the Was, strikes me as highly suggestive—

"For the present it must suffice to say that the ceremonial and oracular preservation of the head, the part which sees and speaks and eats and drinks and listens, is a common feature in all religious usages; that it gives rise apparently to the collections of family skulls which adorn so many savage huts and oratories; that it may be answerable ultimately for the Roman busts and many other imitative images of the head in which the head alone is represented, and that, when transferred to the sacred human or animal victim (himself, as we shall hereafter see, a slain god) it seems to account for the human heads hung up by the Dyaks and other savages about their houses as also for the skulls of oxen and other sacred animals habitually displayed on the front of places of worship."

Spirit-worship of the Karens.

52. The attitude of the Lower Burma Karens towards nat-worship has been indicated in an earlier portion of this chapter. They have been described as temporizing with the spirits of evil till God's promised return. Meanwhile man is not altogether without invisible succour. His guardian spirit, a benevolent being known as his La, ordinarily accompanies each Karen, but is liable to be separated from him and has then to be coaxed back with offerings of food.

The following note prepared by the Deputy Commissioner, Amherst, from materials contributed by the Subdivisional Officer, Kawkareik, contains information about one of the Karen forms of belief which I believe has not been published before:—

"It may not be out of place to give the following narrative relating to a religious sect called 'Talakus' or 'Bapaws,' which is not generally known. 'Talakus' means 'hermits' and 'Bapaws,' 'worshippers of flowers,' which convey the same meaning, as will be seen from the accounts given below. The history or legend of their origin runs thus:

"About a century and a half ago Bodawthagya, a celestial being, seeing from the upper regions that the Karens were without God and religion, sent his grandson 'Saw Yor,' who came down and lived with the Karens at Tawa, a place in Siam known as Pramklaung. Saw Yor, having forgotten his identity and mission, became as one of them, attending only to temporal requirements. When his grandsire saw this he came down to earth and re-

minded him of his mission, which was to teach them religion and bring them to God. The latter thereupon assembled the Karens in a hall and taught them religion. As they were simple as the fowls of the air, not being able to worship elaborately or expensively as other races, they were enjoined to pray with leaves. On this coming to the ear of a Siamese official, that functionary paid him a visit and attempted to capture him on the ground that he was planning a rebellion, when he declared his innocence, informing him that what he was doing was merely to bring the Karens from ignorance to light and religion, with the result that the official was persuaded to return with a present of Rs. 50. Some years after, when he had converted many to his faith, another Siamese official came to him and, accusing him of trying to subvert the Government, attempted also to secure him. Saw Yor gave him the same account of what he was doing and induced him to return with a present of Rs. 100, begging him not to take him away, as, if that was done, the Karens, whom he had taught, would sink again to their former condition. Later on, when his converts grew in number and strength, having arrived at a great age, he was on the point of paying the debt of nature. He then called his two disciples, a Sgaw-Karen lad and a Pwo-Karen lad, to his bedside and asked them to procure wood to make a fire as he wanted to warm himself. They complied with his request. The Pwo-Karen lad being the smaller and younger of the two brought a smaller wood. When the woods were set fire to one after the other, that brought by the Sgaw-Karen lad being bigger and producing greater heat was more satisfactory to Saw Yor. He again requested them to light candles. When they were lit the Sgaw lad's being larger and brighter he was pleased with it and nominating him his successor, passed away. The Pwo lad was wroth at this and vowed that he would not enter the monastery occupied by him, declaring that he was not his superior intellectually or in accomplishments. Here the Sgaw-Talakus and Pwo-Talakus separated, the former adhering to the Sgaw lad, who was afterwards known as Pukyaik, which means 'grandfather god' and the latter to the Pwo lad who became their leader. On the death of Pukyaik, Thaukkyaik, also a Sgaw, succeeded him. On the latter's death Saw Pwo, another Sgaw, became 'Talaku' and stationed himself at Kyondo within Myapudaing circle. When he died Pukso, who is also a Sgaw, succeeded him and is at present at Kyondo.

"This sect is called Talaku, because the founder was a 'Talaku,' a hermit. It is also known as 'Bapaw,' because the members were enjoined to worship with leaves, which in their estimation are flowers. According to their belief parents may pray for their children. When this is done children are exempted from that religious duty. Before a nat-worshipper is received into this sect he has to bring pebbles, one for himself, one for his wife, and one for each of his children, wash them properly, place them at the foot of a tree set apart for the purpose, and pray. From that time he and his family are recognized as Talakus or Bapaws and nat-worship with all its sacrifices has to be forsaken. In this they are different from other Karens who, although professing Buddhism, are not prohibited from worshipping nats. They are unlike the nat-worshipping Karens in another respect also. Breeding fowls, ducks or pigs is prohibited, but they may eat them. There is no such prohibition with the latter, who may breed and eat them at pleasure. The greatest religious festival observed by the Talakus is known as the feast of a 'heap of fire,' which takes place yearly on the full-moon of *Tabodwè*, when, after three days' worship, a heap of wood about 15 cubits high, brought in by those who attend it, is set fire to until it is reduced to ashes. This, it is said, has its origin in the warming of the first hermit, Saw Yor, by the fires lit by his two disciples. Members of this sect are returned as Buddhists because they profess Buddhism also, but they appear to be a distinct sect, whose reliance is much more on Talaku, the founder, and his successors. The leaves used by them at worship are, it may be noted, *eugenia* (ဃော်ပင်) leaves."

* * * * *

The sect professes to be dissociated from Animism, but the Animistic adjuncts to worship, the pebbles, the tree and the fire, and the reliance placed on the founder, mark it out as a cult which is more allied to ancestor or spirit-worship than to Buddhism in its purest form. The narrative of its origin is picturesque, but it is hard even for the most ingenuous to avoid suspecting the hand of the plagiarist. The earlier portion dealing with the heavenly offspring sent on a mission of regeneration and the fear of rebellion that his teaching arouses finds an obvious parallel in New Testament History; while the episode of the two lads and the firewood might well, one thinks, have been suggested by the stories not only of Cain and Abel but also of Esau and Jacob. Even the douceurs presented to the Siamese officials seem a distorted reminiscence of the payment of Cæsar's tribute. On the whole I should not be disposed to regard the traditions of the Bapaw sect as at all typical of indigenous thought.

Muhammadanism.

53. It would be out of place to examine critically here the non-indigenous religions of the province. The principal of these is Muhammadansim, which has doubtless been system-

atically dealt with in all its aspects in the reports of the other Provincial Superintendents, but which will here be regarded merely from a statistical point of view. Within the limits of Burma proper the followers of the Prophet are more in number than the spirit-worshippers, even if we admit that practically the whole population of the "estimated" areas (where data regarding religion were not collected) was—as no doubt it was—Animistic. Subsidiary Tables Nos. III-A and III-B appended to this Chapter show respectively the general distribution of Musalmans in the whole of Burma and in Lower Burma at the last and at the preceding Censuses. In Lower Burma the total Moslem population has risen during the past decade from 210,649 to 287,187, *i.e.*, by 36 per cent. Of every ten thousand souls in Lower Burma 509 are now, on an average, Muhammadans. In 1881, and also in 1891, in a similar number of persons 452 Musalmans would have been found. In his 1891 Report Mr. Eales, in commenting on the identity of the figures for the two earlier years, pointed out that this meant that the increase in Musalmans between 1881 and 1891 had kept step exactly with the increase of the population of Lower Burma as a whole. The 1901 figures show that the rate of progress in the Musalman population has since quickened somewhat. In Upper Burma the rate of growth is not so high as in Lower Burma. In Burma proper as a whole, the increase in the Musalman population is from 253,031 to 337,083; in other words, the provincial total is now 33 per cent. higher than at the last Census. The proportion of Musalmans to every ten thousand persons of all religions has risen from 333 to 365. Of the total Muhammadan population, 49,896, or rather less than one-sixth, were at the 1901 Census enumerated in Upper Burma, the remaining five-sixths and over in the Lower Province. The stronghold of the faith is as is to be expected, when regard is had to the proximity of Chittagong, the Akyab district, which in itself is responsible for 155,162 or nearly half the Musalman population of the entire Province. Nearly one-third of the inhabitants of Akyab profess the faith of Muhammad. No other district in Burma approaches it in the matter of Musalman residents. Rangoon comes next, but far behind, with a total of 43,012, a figure which represents a trifle over 18 per cent. of its total population, and Mandalay district follows with 20,342. In all the Muhammadans aggregate 3·7 per cent. of the total inhabitants of Burma proper whose religions have been returned. If the calculation is made on the population of the Province as a whole including the Shan States and the Chin Hills the proportion falls to 3·3 per cent., for outside Burma proper there are comparatively few Muhammadans. Taken on these larger figures Muhammadanism occupies the third place among the religions of the country.

Hinduism.

54. There were 279,975 Hindus in Burma proper at the date of the 1901 Census. Within this particular area, therefore, Hinduism outnumbered Animism—even with the concession alluded to in the preceding paragraph—by at least twenty thousand adherents, though, when the Shan States and Chin Hills figures are taken into account, this excess is converted into a deficit of rather over a lakh. At the 1891 Census the Hindu population of Burma proper—excluding the political areas—totalled 171,577 only. The Subsidiary tables appended to this chapter thus show us that in that area the Hindus have increased within the past ten years at the rate of no less than 63 per cent., and that of every ten thousand persons inhabiting Burma proper, 303 on an average now profess the Hindu faith. The rise of 63 per cent. is lower than that which took place during the preceding decade (77 per cent.), and, when compared with the 1872-81 figure (140 per cent.), dwindles into comparative insignificance. As it is, however, it ts nearly double the Muhammadan rate of growth during the same decade. Everything points to the fact that the Hindus are gradually asserting their vast numerical superiority, and that, when their prejudices against sea voyages have been overcome, they are bound to outstrip all other competitors. In 1872 the number of Musalmans in British Burma was nearly three times as great as that of Hindus. Year by year during the past thirty years the disparity has been reduced; Census after Census has shown that the Hindus were creeping up. They are still behind the Muhammadans in number, and, so far as one can judge at this stage, they are not likely to have passed them even at the next decennial enumeration, but there seems to be no question that, unless the resources of

the country first give out, they will in the end out-number them. As in the case of the Musalmans, the bulk of the Hindus enumerated in Burma proper at the recent Census were found in Lower Burma, the Upper Burman Hindus forming only 12 per cent. of the provincial total. Mandalay is the only Upper Burma district where the Hindus exceed four thousand in number. There are more than twice as many Hindus in Rangoon Town alone than in the whole of Upper Burma, and the Hanthawaddy district by itself boasts of a larger Hindu population than all the Upper Burma districts put together. Taken on the population of Burma proper, Hinduism shows a percentage of 3·0. Computed on the Provincial total including the Shan States and the Chin Hills, where there were only 5,509 Hindus altogether, the percentage falls to 2·7. It is fourth in numercial strength of the religions of the province.

Christianity.

55. The number of Christians in Burma proper in 1891 was 120,768. This total has now risen to 145,726, a figure which represents an increase of 21 per cent. The growth of the Christian population during the decade that is just over is not so marked as it was during the preceding decennial period. In 1881 the returns showed 84,219 Christians, and the rise from this to the 1891 total meant an accession of strength to the extent of 43·4 per cent. The reduction of the British garrison is no doubt a fact that has operated to arrest the progress of the growth of the Christian population in the province. What increase there is is proportionately greater in Upper than in Lower Burma. In his 1891 Report Mr. Eales said in regard to the Christians of Upper Burma—

"It would be unfair to take Upper Burma into our calculations, as it is only after the annexation of the Kingdom of Ava that our missionaries have had free opportunities since Thebaw Min came to the throne. The six years that have elapsed since the proclamation of Lord Dufferin annexing the Upper Province have witnessed a wonderful extension of missionary work in various districts of the newly annexed province, and everything points to the probability that the returns of 1901 will reveal still greater progress."

Events have shown that Mr. Eales' surmise was correct. The Upper Burma Christians in 1891 totalled 8,786. In 1901 they had risen in number to 12,107. This increase of 38 per cent. cannot but, in some measure, be attributed to increased activity in the mission field. In the Province as a whole the Christians totalled 147,525. Of these between one-fifth and one-sixth were enumerated in the Toungoo District, which, second only to Bassein in 1891 in its aggregate of Christians, now shows the highest district total in this particular.

Christian denominations.

56. The strength of the various Christian denominations is shown in Imperial Table XVII. Subsidiary Tables Nos. III-C and III-D indicate the relative growth of the different sects during the past in Lower Burma and Burma proper. Before going into details denomination by denomination, it may be well to draw attention to the very large number of people who are shown in the tables under the head "Denomination not returned." Some little time before the date of the Census I issued a letter to Ministers of religion asking them to assist in the enumeration by instructing the native members of their congregations, as far as possible, how to answer the enumerators, when, on the night of the census, they asked them to name the sect to which they belonged. I also suggested that it would be advantageous if those who could write were told how to write the name of their denomination in English or the vernacular. I had hoped that this precautionary measure would have resulted in a very small aggregate of entries in which the Christian sect was not shown. In this respect I was disappointed, for the number of cases in which column 4 of the schedule showed "Christian" only was surprisingly large. Here and there I was able to infer from the locality of enumeration what the sect of Native Christians probably was and to show the persons concerned accordingly, but in nearly nineteen thousand cases the data seemed insufficient to justify any assumption as to the sect of the Christians concerned, who in consequence were not placed in any specified denomination. Looking at the figures as a whole, it seems clear now that the bulk of Christians whose denominations were not returned must have been Baptists. The number of Native Baptists is so large that I fear that the pastors may have been unable, with the best intentions, to comply with my request in re-

spect of more than a portion only of their charges. Toungoo gave the largest number of doubtful cases. Here the Anglicans, the Baptists and the Roman Catholics are all active.

Anglicans.

57. In Burma proper the Anglican communion totalled 12,961 males and 8,555 females at the March 1901 enumeration. There is a decrease since 1891 among Europeans, due doubtless to the withdrawal of British troops here and there, but a very substantial increase among Eurasians and Natives, and, on the whole, the Lower Burma figures are 93 per cent. higher and the figures for Burma proper 76 per cent. higher than ten years ago. The decrease among Europeans is confined to Lower Burma. In Upper Burma the figures under this head show a slight advance since the last Census. In Burma proper the comparison of totals cannot be carried back further than the 1891 Census, but in Lower Burma it will be seen that the growth among the Anglican community during the past ten years is proportionately far greater than at the preceding two decennia. The figures given above do not comprise the totals for the Shan States and the Chin Hills. In these latter areas there were 791 members of the Church of England on the 1901 Census night.

Roman Catholics.

58. Like the Anglicans, the Roman Catholics show a decrease under the head of Europeans during the past decade, but an increase on the whole and notably in the case of Native Christians. There is further (what is not the case with the Anglicans) a falling off among the Eurasians. It is, however, slight, and may in part be accounted for by more correct classification. The diminution in the European totals has its origin, no doubt, in the movements of British regiments. As a whole the Roman Catholics have increased in Burma proper at the rate of 48 per cent. since the last Census. In Lower Burma the rate of increase for the same period is exactly the same. A total of 853 Roman Catholics, not included in subsidiary Tables Nos. III-C and III-D, were enumerated in the Shan States and the Chin Hills in March 1901.

Baptists.

59. Except in the case of Eurasian females, there would seem to have been a general decline in the strength of the Baptists, the most strongly represented denomination in Burma. The diminution among Europeans, which is large, is no doubt real and is in all probability due to the transfer of Baptist soldiers from Burma. The decrease among Eurasians, which is small, is less likely to be an actual falling off in numbers. The drop in the total of Baptist natives is, as I have shown above, undoubtedly apparent only. If we assume, as we may reasonably do, that by far the greater number of the natives who omitted to return their sect at the Census belonged to the Baptist communion, there seems to be no reason for thinking that this denomination has in reality gone down in numbers during the past decennium. On the contrary it is probable that there has been a slight increase since 1891. In all 138 Baptists were enumerated in the Shan States and the Chin Hills. The members of this sect muster in the greatest force in the Districts of Bassein and Toungoo.

Other denominations.

60. Of the other Christian denominations the most numerous is the Methodist, which numbers 1,238 adherents in Burma proper. The bulk of the people classified under this head are, strictly speaking, Wesleyans. The Wesleyans have several missions in Burma and manage one of the two Mandalay leper asylums. In Burma proper the Methodist increase during the past decade has been one of 115 per cent. After the Methodists in point of numbers come the Presbyterians. They number in all 620, of whom 53 only were enumerated in Upper Burma. The Lutherans and Armenians come next. Their totals show that, while the former denomination is rapidly gaining ground in Burma proper (399 as compared with 235 in 1891), the latter has increased there by only 6 per cent. since the last enumeration. It should be pointed out, however, that the Lutheran population, which consists largely of the Scandinavian and German sailors on board the ships in the ports of the province, is liable to marked fluctuations. The Greek Church numbers only 67 adherents in Lower Burma and three in Upper Burma. Of the minor denominations number-

ing 28 males and 20 females, the Plymouth brethren claim the largest number of members.

Sikhism.

61. Sikhism was represented in the province on the 1st March 1901 by a total of 6,596 persons, 5,723 of whom were males and 873 females. The Military Police claims the bulk of the Sikh population of Burma. The total is 3,236 higher than in 1891, the females having risen in number during the decade to a greater extent than the males. At the last enumeration the Census Superintendent opined that many persons who were Sikhs by religion had been included among the Hindus. Experience in the abstraction office has shown me that Mr. Eales' view was probably correct. Very frequently I have found in the schedules that persons returned as Sikh by caste were entered as Hindus in column 4, and constant care was required to ensure that Sikhs were not shown by the posters on the red slips reserved for the Brahmanic population. So substantial an increase among the Sikhs is hardly to be looked for when regard is had to the reduction in the Military Police that has been effected during the past decade, and I think I have warrant for assuming that the rise in the strength of the religion is to be accounted for partly by an improved system of abstraction. The Sikh elements in the Burma regiments must not, however, be lost sight of in a consideration of the matter. The creation of these bodies has doubtless largely counterbalanced the dwindling in the Sikh population caused by the reduction of the strength of the Military Police force.

Judaism.

62. After the Sikhs the Jews come next in point of numbers. The growth of the latter during the past decade is remarkable. In 1891 they totalled 351 only. They have now reached an aggregate of 685 souls, of whom 417 are males and 268 females. As is to be expected, the bulk of the Jews (373 males and 253 females) are domiciled in the towns of the province, and considerably over half their number reside in Rangoon. They are a small but well-to-do community.

Zoroastrianism.

63. Between the 1881 and the 1891 enumerations the Parsis increased by 15 persons only, namely, from 83 to 98. At the 1901 Census there was a more marked rise in the Zoroastrian population to record. The Parsi community now numbers 245 (160 males and 85 females) or more than double what it numbered ten years ago. The rise, which must be due largely to immigration, is far greater among the females than among the males. The latter have increased during the decade from 84 to 160, while for the fourteen females returned at the Census of 1891 we now have 85, or a total just over six times as great. With the weaker sex among the Parsis thus strongly reinforced one may look with some confidence for a substantial addition to the ranks of the religion before the 1911 enumeration. There were a total of 80 Parsi males and 46 Parsi females in Rangoon on the 1st March 1901, while Mandalay returned 22 of the former sex and 12 of the latter on the same date.

Jainism.

64. Ninety-three Jains returned themselves as such at the 1901 Census, and of these 50 or rather more than half were enumerated in the towns of the province. No comparison with the figures for the 1891 Census in respect of this religion is possible, as no Jains were shown in the returns for that year. There were doubtless Jains in the province ten years ago, but there seem good grounds for assuming that they were included in the Hindu population. The sects of Jains, like the sects of other non-Christian religions, were not returned in Burma at the recent Census, and I was therefore unable to comply with a request made by the members of the Bharatvarshiya Digambar Jain Mahasabha that entries should be made against all Jains in the schedules, showing to which of the three Jain sects—the Digambara, the Swetambara and the Dhondia—each belonged.

SUBSIDIARY TABLE No. III-A.

General distribution of Population by Religion.

Religion.	Upper and Lower Burma combined.						Whole province, inclusive of Shan States and Chin Hills.		Remarks.
	1901.		1891.		*Percentage of variation.*	*Variation in proportion, columns 3 and 5.*	1901.		
	Number.	Proportion per 10,000.	Number.	Proportion per 10,000.	1891—1901.	1891—1901.	Number.	Proportion per 10,000.	
1	2	3	4	5	6	7	8	9	10
Buddhists	8,223,071	8,910	6,888,075	9,056	+ 19	— 146	9,184,121	8,862	
Animists	237,508	257	168,449	221	+ 41	+ 36	399,390	385	Excludes figures for "Estimated Tracts," of which the bulk of the population are Animists.
Musalmans	337,083	365	253,031	333	+ 33	+ 32	339,446	328	
Hindus	279,975	303	171,577	226	+ 63	+ 77	285,484	276	
Christians	145,726	158	120,768	159	+ 21	— 1	147,525	142	
Jains	93	7	...	5	+ 79	+ 2	93	7	
Jews	675		351				685		
Parsis	245		96				245		
Sikhs	5,498		3,164				6,596		
Not returned	...		49				...		
Others*...	28		...				28		
Total ...	9,229,902	10,000	7,605,560	10,000	+ 21		10,363,613	10,000	

* Includes Agnostics, Theists, Freethinkers.

SUBSIDIARY TABLE No. III-B.

General distribution of Population by Religion, Lower Burma.

Religion.	1901.		1891.		1881.		Percentage of variation, (+) increase or (—) decrease.			Variation in proportion, columns 3, 5 and 7.		
	Number.	Proportion per 10,000.	Number.	Proportion per 10,000.	Number.	Proportion per 10,000.	1891 to 1901.	1881 to 1891.	Net variation, 1881 to 1901.	1891 to 1901.	1881 to 1891.	Net, 1881 to 1901.
1	2	3	4	5		7	8	9	10	11	12	13
Buddhists	4,817,774	8,533	4,043,506	8,680	3,251,584	8,702	+ 19	+ 24	+ 48	— 147	— 22	— 169
Animists	158,552	281	149,021	320	143,581	384	+ 6	+ 4	+ 10	— 39	— 64	— 103
Musalmans	287,187	509	210,649	452	168,881	452	+ 36	+ 25	+ 70	+ 57	...	+ 57
Hindus	245,984	436	142,522	306	88,177	236	+ 73	+ 62	+179	+ 130	+ 70	+ 200
Christians	133,619	237	111,982	240	84,219	225	+ 19	+ 33	+ 59	— 3	+ 15	+ 12
Jains	87		...		5							
Jews	541		268		204							
Parsis	198		87		83							
Sikhs	1,706	4	573	2	...	1	+ 170	+188	+677	+ 2	+ 1	+ 3
Not returned	...		19		...							
Agnostics, &c.	25		...		...							
Brahmos	...		...		37							
Total ...	5,645,673	10,000	4,658,627	10,000	3,736,771	10,000	+ 21	+ 25	+ 51			

SUBSIDIARY TABLE NO. III-C.

Variation in strength of principal Christian denominations in Lower Burma since 1881.

Sect.	Number returned.	Number returned.	Number returned.	Percentage of variation, increase (+) decrease (—).	Percentage of variation, increase (+) decrease (—).	Percentage of net variation increase (+), decrease (—).
	1901.	1891.	1881.	1891—1901.	1881—1891.	1881—1901.
1	2	3	4	5	6	7
Baptists	65,237	79,748	55,874	— 18	+ 43	+ 17
Roman Catholics ...	30,728	20,828	16,281	+ 48	+ 28	+ 89
Anglicans ...	17,414	9,041	10,038	+ 93	— 10	+ 73
Methodists ...	1,071	523	238	+ 105	+ 120	+ 350
Presbyterians ...	567	329	655	+ 72	— 50	— 13
Lutherans ...	351	234	346	+ 50	— 32	+ 1
Armenians ...	240	186	131	+ 29	+ 42	+ 83
Greeks	67	13	95	+ 415	— 86	— 28
Others	17,944	1,080	541	...	...	...
Total ...	133,619	111,982	84,219	+ 19	+ 33	+ 59

SUBSIDIARY TABLE NO. III-D.

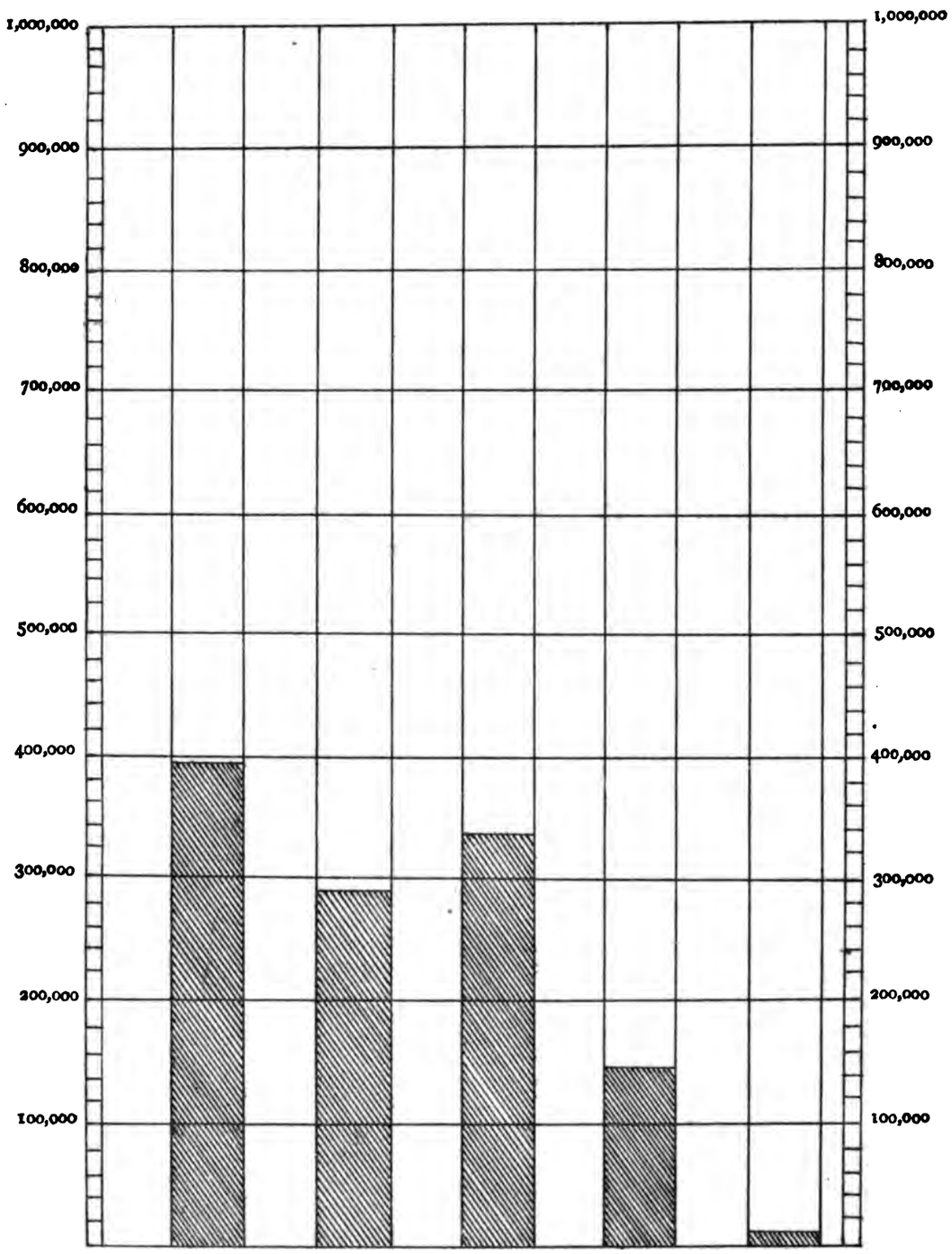
Variations in strength of principal Christian denominations in Burma proper since 1891.

Sect.	Number returned.	Number returned.	Percentage of variation, increase (+) decrease (—)
	1901.	1891.	1891—1901
1	2	3	4
Baptists	66,722	81,387	— 18
Roman Catholics	36,252	24,542	+ 48
Anglicans	21,516	12,202	+ 76
Methodists	1,238	576	+ 115
Presbyterians	620	441	+ 41
Lutherans	399	235	+ 70
Armenians	256	242	+ 6
Greeks	70	15	+ 367
Others	18,653	1,128	...
Total ...	145,726	120,768	+ 21

CENSUS, 1901.

DIAGRAM.

Showing proportion borne by the adherents of the principal religions in Burma to each other and to the total population of the Provinces.



NOTE.—The parallelogram represents the total population of the Province whose religions have been recorded. The shaded portions represent the proportion which the populations professing the non-Buddhist religions bear to each other and to the total population. The unshaded portion of the parallelogram represents the Buddhist population.

No. 6, Supt., Census, 25-7-02—1,210.

CHAPTER IV.

AGE, SEX AND CIVIL CONDITION.

Age returns to be first considered.

65. In the following paragraphs the age, sex and civil condition of the population of the province are discussed. There is no more obvious a natural division of the inhabitants of a country than into males and females, and, speaking theoretically, the separation of the enumerated into sexes should be the first of the matters dealt with in this chapter to engage our attention. Following, however, the order prescribed for adoption, we will in the first place consider what are the principal facts to be learned from a consideration of the figures of the ages of the people who were enumerated in Burma on the 1st March 1901.

The ages returned. Definition of "age" and classification of ages.

66. The "age" for census purposes was invariably the total number of years the person concerned had completed. Professor von Mayr in his *Statistik and Gesellschaftslehre* has shown how no system of age recording can be looked upon as wholly satisfactory that does not provide for an exact record of the year of birth of each person enumerated. In a country like Burma, where horoscopes are common, the data relating to dates of birth would in all probability be comparatively trustworthy, but India as a whole has doubtless not yet reached that stage of culture that would enable reliable results under this head to be obtained. As in 1891, the system adopted in the classification of ages at the 1901 census was on the whole quinquennial. The first five years of life were, it is true, tabulated separately, but from thence onwards the ages were grouped by fives till 59 was reached, after which all ages of 60 and over were dealt with together. It is thus that ages are shown in Imperial Table VII, the table most intimately connected with the ages of the people. Age-periods are shown also in Table VIII (Education), in Table XII (Infirmities), in Table XIV (Civil condition by age for selected races) and in Table XVIII (Europeans, &c., by race and age), but it is only in the Infirmities table that they are given in as much detail as in Table VII.

Want of accuracy in age-returns.

67. Much has been written about the probable want of accuracy in the age-returns obtained at censuses, of the general ignorance of their ages displayed by the people, of the tendency of the enumerated to return their ages in multiples of five or ten, of the habit of substituting the current year of life for the number of completed years and of other innocent causes of error, to say nothing of the incentives to wilful misstatement afforded on the one hand by vanity and on the other by a revenue system which gives exemption from certain forms of taxation to persons of below and above certain ages. Some of these disturbing factors exist, no doubt, in Burma, and it would be vain to look for anything approaching absolute accuracy in the age-figures secured. Still, when everything is taken into consideration, I should be disposed to think that the data regarding age extracted from the Burma schedules were probably a closer approximation to the actual facts than those obtained in any other province of the Empire; in fact, in the matter of accuracy, not far behind those of many European countries.

Unadjusted age-return.

68. Subsidiary Table No. IVA appended to this chapter gives the unadjusted ages of 100,000 of each sex. The figures have been specially obtained from the schedules of a few representative townships of Upper and Lower Burma. The localities chosen were such as did not exhibit an undue preponderance of foreign immigrants, and may, I consider, be taken as fairly typical of the province as a whole. It presents no very striking divergencies from the figures given in the table printed at page 109 of the 1891 report. The same phenomena are apparent throughout in both; the inevitable popularity of the multiples of five and ten, the first decline among males from four figures to three at the age of 29, and from three figures to two at the age of 69, the high place taken by 3 in the first five years of life. It is clear that much the same causes have been at work in both tables. When, however, we

compare these figures with the figures for India as a whole given at page 275 of Mr. Baines' General Report for 1891, we find very striking differences. What in Burma is merely a marked preference for certain ages might in India generally almost be called a craze. The following few examples will show how relatively small the popularity of the multiples of five and ten adverted to above is in Burma. The figures are for every 100,000 males:—

Age.	India, 1891.	Burma, 1891.	Burma, 1901.
29	472	835	996
30	5,850	3,958	3,578
31	301	879	930
39	322	661	639
40	5,240	2,665	2,445
41	216	667	577
64	72	273	239
65	493	484	748
66	59	205	247

Whereas in Burma the favoured figures, 30, 40 and 65, are never returned as much as five times as frequently as the figures in their close neighbourhood, in India as a whole 30 is given more than twelve times as often as 29 and very nearly twenty times as often as 31, while 40 is more than sixteen times as popular as 39 and almost twenty-five times as popular as 41. It is much the same with other ages. To dwell on another point, it may be noted that, to all intents and purposes, 18, 28, 38 and 48 have been returned no more frequently in Burma than the ages in their immediate vicinity (27, 29, 37, 39, &c.): there is hardly any of that fondness for numbers ending with eight, which is another feature of the Imperial figures. The predilection for eight is due, in India no doubt, to the habit of counting by fours, possibly also to the influence of colloquial expressions. I cannot find that such colloquial expressions as exist in Burma, such as, for instance, "four, five, eight" (ဝေးငါးရှစ်) or ဆယ်ပိဿာ "a quarter," (*i.e.*, of one hundred, or 25) have left any recognizable impression on the ages returned at the enumeration. On the whole it seems to me that there is ample justification for the belief that Burmans generally have a far better idea of their ages and are far more likely to give them correctly to a census enumerator than the majority of the inhabitants of the rest of British India.

Adjustment of incorrect figures returned.

69. It would, of course, however, be futile to assume that even the Burma age-returns were an approximation to what by rights they should have been. To be of any real value for statistical purposes the figures require to be adjusted or "smoothed," and this delicate process can be efficiently carried out only by an actuarial expert. The services of Mr. Hardy have been secured by the Government of India for the purpose of analysing and adjusting the age-returns of the census and of preparing from these data life-tables, tables of age distribution and birth and death-rates for the various provinces, and he has been supplied with the required figures from Burma. It would, as the Census Commissioner has recently pointed out, "be useless to attempt to anticipate the results of Mr. Hardy's researches by preparing life-tables which would carry no weight" and, in view of what is being done in this regard outside the purely Census offices, I do not propose to attempt even the approximate adjustment of ages which has been suggested by Mr. Risley to Provincial Superintendents.

The mean age of the population.

70. The mean age of the two typical sets of 100,000 of each sex whose unadjusted ages are given in Subsidiary Table No. IVA is 25·16 years for males and 25·28 years for females. This is slightly higher than the mean age for the whole province obtained in 1891 (24·57 years for males and 24·51 years for females). The figures, based as they are on unsmoothed data, can at best only be looked upon as approximate, but, viewed in the light of the returns for India and Burma at the last Census, they may safely be regarded as near enough to the actual facts for the purposes of a general comparison. The slightly higher mean for females than for males is not what would be expected in a community where the stronger sex is more largely

recruited from without than the weaker, and indicates in all probability that the areas selected were on the whole rather below the provincial average in their sum of able-bodied male immigrants than above it, for there can be no question that it was the immigrant element that in 1891 raised the Burma mean for males above that for females. Contrasted with the data furnished by the more civilized nations of the West, the Burma means are distinctly low, even lower than those for Italy (35·1 years for males and 35·4 years for females), which are a good deal behind those for the majority of European countries. In England and Wales the figures are 43·7 years for the stronger and 47·2 years for the weaker sex, and in Europe generally they seldom fall below 40 years.

Calculated on the figures for the Province as a whole, as embodied in Imperial Table No. VII, the mean age of the population is 25·04 years for males and 24·75 for females. Judged by a European mean, the figures would appear to be somewhat discouraging. The Census Commissioner for India has, however, a word of warning to utter against the drawing of despondent inferences from the age-returns obtained at a Census. In a note on the subject of the ages of the people he writes as follows:—

"In connection with this as well as with the general question of the value of the mean age of the living, the following remarks of a leading German statistician deserve consideration: 'Great caution is necessary in drawing far-reaching conclusions from statistics of the mean age of the living. Like all large statistical averages, such figures are of value rather for the questions which they suggest than for the answers which they supply. In the case of mean age this remark applies equally to its variations at different periods. Nothing could be more fallacious than to assume, as has been done in France, that a rise in the mean age of the living of itself indicates an increase in the duration of human life, for it is clear that the mean age is affected not only by mortality but also by the course of the birth-rate. If the births increase, the numbers in the younger age-groups increase also, and this reduces the mean age of the living. On the other hand, if the birth-rate declines, the converse result follows. A population which is actually dying out is bound to show a constant rise in the mean age of the living.'"

Proportionate increase or decrease in age-periods since 1891.

71. That births in Burma are probably on the increase, the following few figures will show. They are a combination of the totals for the two sexes and the three civil conditions given against five typical age-periods in Subsidiary Table IVC appended to this Chapter, and show the distribution over those age-periods of every twenty thousand of the population at the last two enumerations.

	1901.	1891.
0—10	5,310	5,283
10—15	2,131	2,341
15—25	3,653	3,758
25—40	4,604	4,342
40 and over	4,302	4,276
	20,000	20,000

The rise in the lowest age-period is not very marked, but it is sufficiently patent to warrant an assumption either that the provincial birth-rate is improving, or that better care is taken of infants than in the past. Probably both factors have been at work. For the decrease apparent in the succeeding two age-periods, I would hold the annexation of Upper Burma and the troublous days that followed it largely responsible. For what corresponds generally to Mr. Eales' "reproductive age-period," that extending from 25 to 40 years, the figures are a good deal higher than in 1891. Increased immigration is of course one of the main causes—perhaps the main cause—of the rise. There has been no falling off among the seniors; the population of 40 years and over is numerically stronger than it was ten years ago, and the figures certainly contain no indication of anything save a diminution in the death-rate of the province.

Proportion of the two sexes.

72. Imperial Table No. I shows us that of the 10,490,624 persons enumerated in the Province on the night of the 1st March 1901, 5,342,033 were males and 5,148,591 females; in other words, that 50·9 per cent. of the provincial population was of the male sex and 49·1 per cent. of the female, or that, for every thousand males there were present 962 females. This last figure is precisely the same as the corresponding figure for the 1891 Census and it is clear that none of the physiological

and social forces that have been at work during the past decade have been able to materially alter the relative strength of the two sexes. In provinces which labour, whether deservedly or not, under the suspicion of female infanticide, it is a matter of some moment to be able to assign causes for and to justify any marked disparity in the sexes which is to the disadvantage of the weaker. In Burma this gruesome factor does not come into play, but it is incumbent on us, nevertheless, to investigate the causes which have operated to bring about what would not, under normal conditions, be expected in a province like Burma, namely, a marked preponderance of males. I look upon the preponderance as abnormal, because there appears to be an almost universal tendency for the proportion between the sexes to move in favour of the weaker vessel according as the woman rises higher and higher in the social scale. In European countries, almost without exception, the censuses show more females than males (in Sweden in 1890 and in Norway in 1891 the proportions rose as high as 1,065 and 1,092 females respectively to every 1,000 males), whereas in Asia it is the exception, not the rule, for the females to outnumber the males, and the same is the case in Africa. In his *Statistik and Gesellschaftslehre*, Professor Georg von Mayr gives the following figures for the four continents:—

Continent—	Females to every 1,000 males.
Europe	1,024
Asia	958
Africa	968
America	973

The same authority goes so far as to say that, if it were possible wholly to do away with the migration factor, one might regard the excess of females over males or the reverse as a direct indication of the high or low estimation, as the case might be, in which the fair sex was held in the social world.

"Wäre es möglich, das Moment der Wanderverschiebungen ganz auszuschalten, so könnte man geradezu die Thatsache vorhandenen oder mangelnden Weiberüberschusses als Ausdruck der guten oder schlimmen sozialen Lage der Frau betrachten."

Nowhere within the limits of British India, perhaps nowhere in Asia, is the social position of woman so assured as in Burma, and it is for us to consider why this position is not, as it should no doubt be, reflected in the sex figures of the province; why, in a word, the figure for Burma is as low as 962, when in 1891 in Bengal and Madras, where women rank far lower in the social scale, it was as high as 1,006 and 1,022. The reason is that, whatever may be done in other countries, the migration factor adverted to by Professor von Mayr cannot, in Burma, be set aside or ignored. As we have seen in an earlier chapter, about 13 per cent. of the increase of the population of Lower, and 3·8 per cent. of that of the population of Upper Burma is due to foreign immigration and, as the great bulk of the immigrants are males, the ratio of males to females is disturbed to a very appreciable extent.

District proportions, Lower Burma.

73. That it is the foreign that is the disturbing element is amply shown by the district figures given in Subsidiary Table No. IVB, appended to this chapter. There are 36 districts in Burma proper; of these 20 are in Lower Burma, where immigration has most markedly affected the population totals, and the remaining 16 in Upper Burma, where the indigenous element is stronger. Of the Lower Burma districts all but five (Kyaukpyu, Prome, Henzada, Tavoy and Thayetmyo) show an excess of males, while of the Upper Burma districts all but four (Mandalay, Bhamo, Myitkyina and the Ruby Mines) exhibit a preponderance of females. I must confess that I am unable adequately to account in Lower Burma for the excess of males in the districts of Northern Arakan and Salween, where conditions are such as to lead one to anticipate a numerically superior female population. It may in part be due to two causes which have been found to operate among wild communities and which are touched upon below. In the case of all the other districts of Lower Burma the surplusage of males can nearly always be traced back to the presence of Indian or other immigrants. In Prome and Thayetmyo any addition to the male population that may have been caused

by the influx of foreigners has been more than counterbalanced by the exodus of able-bodied Burman men as harvesters to the delta, and a similar depletion seems to have been taking place in Henzada. In this last-named district, as in Thayetmyo, the males were in 1891 in excess, but are now in the minority. In Rangoon city the disparity between the figures for the two sexes reaches its high-water mark. There were 165,545 males as against only 69,336 females in the city on the 1st March 1901, and the totals for 1891 give no indication that anything approaching the normal ratio between the sexes will be established there for many years to come. In fact, the proportion of females to males has been dropping uninterruptedly for the past thirty years. Rangoon is merely typical of the state of things that exists generally throughout Burma, according as there are few or many Indian immigrants to affect the sex figures. How many of these immigrants are permanent settlers and how many mere industrial birds of passage it is impossible for us to say. It is much to be regretted that we have not now the opportunity that the Deputy Superintendent had in 1881 of forming a conception of what the relative strength of the sexes would have been in Lower Burma at a period of the year when milling was over and the harvest had been reaped. Had such an opportunity been given, we should doubtless have had figures as suggestive as those which Mr. Copleston was able to comment on in paragraph 110 of his Report.

District proportions, Upper Burma.

74. Turning now to Upper Burma we may take it that the preponderance of females in 12 out of the 16 districts is the normal outcome of the physiological forces at work. In the other four special causes appear to have operated to send down the total of females as compared with that of the males. What they are is not always very plain. In Mandalay district and city the excess of males over females is insignificant, and may be put down entirely to the military and foreign Indian elements in the district. Like factors have been at work no doubt in Bhamo, Myitkyina, and the Ruby Mines, but I question whether they account for the whole of the difference between the sexes. In the Ruby Mines district the concourse of ruby miners and the presence of large numbers of Maingtha coolies must further have swelled the male total, but it seems as though one must look further than this even for the cause of the general disparity. It is not inconceivable that it may have been due to the wilful omission of females from the returns. At page 245 of his General Report of 1891, Mr. Baines, when commenting on the deficiency of females in several of the provinces of India, says:—

Possible omission of females from the returns in backward tracts.

"The above remarkable discrepancies must represent a state of fact or a state of feeling. That is, the difference between the two sexes in point of numbers must be real, and thus due to some general and widespread cause, natural or social, or else it must exist only in the census returns and be due to the estimation in which women are held by their male relatives * * * there is the inclination on the part of some classes of householders * * * to assume that an enquiry such as the census, instituted by the Government, is very unlikely to be applicable to individuals of so little importance as girls and women, so that the latter are simply ignored in making the return without any intent to deceive. Then again, there comes the third section of the community who are open to suspicion in this respect, and that consists of the small settlements of forest tribes in the wilder parts of some of the hill tracts, who deliberately conceal the number of their women, not on either of the grounds abovementioned, but from mere ignorant apprehension of what may follow the acquisition of this information by persons outside their tribe."

Mr. Stirling's report on the Census Operations in the Northern Shan States bears direct testimony to the fact that the first at any rate of the above states of feeling existed within his charge. Old people who were past work, we are told, were not thought by the enumerators worth counting; pôngyis and nuns were omitted because they had renounced the world and its allurements; lunatics and cripples "because they are below the level of human beings." There is no special reference here to the ignoring of females generally, but the tendency to treat non-entities in the body politic as negligeable quantities for enumeration purposes is clearly indicated. I can only account for the whole of the deficiency of females in the three districts aforesaid, and possibly also in Salween, by the operation among the Kachins and other backward communities in the north and east of the pro-

vince of the first, and probably also of the second of the factors alluded to by the late Census Commissioner for India. I am aware that the figures for some of the wilder areas, where a similar state of things might be expected to exist, lend no support to this theory. Though in the Arakan Hill Tracts males are in excess, in the Chin Hills and in the Shan States generally, there is a surplusage of females, and in Katha the fair sex predominates. Much, however, depends upon national idiosyncracies. I think it quite conceivable that a course of action suggested in particular circumstances to a Kachin might differ considerably from that occurring in like conditions to a Chin or a Karen. Much, too, depends on the manner in which the enumerated are approached by the enumerators. Moreover, I hold that it is not impossible that the excess of females in the Shan States and the Chin Hills may have been so great that even the working of the causes in question failed to bring the total of the weaker sex below that of the stronger. I have been particularly struck by a passage in the Census Report of Mr. Wooster, Assistant Political Officer, Karenni, printed at pages lxxii to lxxiv of the Appendices to this volume, in which he says that during his census tours through his charge, namely, at a time when he must have been more than ordinarily alive to any noticeable features in the population as a whole, he "always found a superabundance of females." One would have imagined that an excess that was patent enough to force itself upon the Assistant Political Officer's attention would have left its impress on the figures: strange to say the totals actually are, males, 23,148; females, 22,647; there is a positive excess of 501 in the males instead of a deficiency, an excess that swallows up the whole of the addition to the population caused by the Military Police and other non-indigenous male strangers, and leaves a substantial balance in favour of the men to be accounted for. Whatever may have been the case elsewhere, there seems to be no question that some portion of the women and girls whom Mr. Wooster saw were never included in the Karenni estimate. There is nothing to show that there is a paucity of women among the Kachins. On the contrary, in his Northern Shan States Report, Mr. Stirling tells us that in the estimated areas "Kachin families averaged five persons, two males and three females," and wonders whether an equally large excess of females is apparent in the census of Kachins elsewhere. If what was the case in North Hsenwi was the case in the neighbouring Kachin area in the Ruby Mines (and it is quite possible that it was), the fact would have been disclosed by the census figures, unless one or both of the causes above referred to had led to the omission of a number of females from the enumeration.

Relative strength of the sexes among the country-born.

75. An insight into the normal condition of things in regard to the relative strength of the sexes in Burma is afforded us by Imperial Table No. XI, which gives the birth places of the enumerated. From it we learn that of the folk who were recorded in the schedules on the night of the 1st March 1901, a total of 9,888,124 had been born within the limits of the province, and that of these indigenous persons 5,010,872 were females and only 4,877,252 males. The figures in this Table are illuminating, not only in so far as they show how decidedly the weaker sex preponderates among the home-born, but as proving how much of the Burman emigration from Upper to Lower Burma is undertaken by males, and represents the search on the part of indigenous men and boys for work in localities more favoured than their own, for the female excess of 133,620, while distributed over fifteen of the sixteen Upper Burma districts, is confined to six only of the Lower Burma areas. In the remaining fourteen Lower Burma districts, there is surplusage of males even among the country born. Judged by these figures the migration shows signs of being to a considerable extent temporary only. Had it been more generally permanent, I believe that more wives would have come with the men.

Present relative strength of sexes as compared with strength at previous censuses.

76. Subsidiary Table No. IVB appended to this chapter shows the number of females to every 1,000 males by natural divisions, districts and cities, as returned at the last four censuses. For Upper Burma the comparison can only be carried back to the 1891 enumeration, and, on the assumption that the figures for the Upper Chindwin and the districts of what is now the Mandalay division were in 1891 defective, there is little of importance to record in connection with the variations between the figures for the two censuses. Where the data are fairly

reliable they show on the whole an alteration of the totals in favour of the male sex. Of all districts in Burma the Lower Chindwin has the largest proportion of females to males (1,266 to 1,000). This, though far higher than that of any other portion of the province, is lower than at the close of the preceding decennium, when it was 1,292. The matter has not been touched upon in the district report, and I presume that there is no special reason for this very large preponderance of females. The figures are presumably due to the ordinary causes. A normal excess of females has no doubt been converted into an abnormal one by the emigration of able-bodied male harvesters and boat and raft coolies to other districts. In Lower Burma the fluctuations since 1872 are very marked. In Rangoon and Myaungmya the proportion of the weaker to the stronger sex has been steadily declining, while in Amherst, Kyaukpyu, Sandoway, Prome, Thayetmyo and Toungoo the movement in favour of the females has been uniform through the three decades. In all the other districts what increases or decreases are apparent have not been maintained through the thirty years under review. In Hanthawaddy for instance, in the interval between the 1872 and 1881 enumerations, the proportion borne by the females to the males fell from above to below three quarters; by 1891, however, the tide had turned in favour of the women, and the figures for the last census show that the females have during the past ten years still further re-asserted themselves numerically, though not by any means to the same extent as during the preceding decennium. Precisely the same "see-saw" phenomena are apparent in the Pegu district. In what I may call the "immigration" districts these fluctuations are, of course, to be looked for.

Births and deaths by sexes in Lower Burma.

77. As I have shown elsewhere, the collection of vital statistics in the province has not reached a stage that allows of much use being made of the returns for census purposes. Taking, however, what data there are, we learn that in Lower Burma there were registered during the ten years 1891—1900, the births of 707,223 males and of 658,052 females. Here the preponderance of male births is in accordance with the practically universal rule that in the aggregate more boys than girls are born into the world. The excess of male over female births (1,070 male to every 1,000 female) is slightly in advance of the 1891 figure (1,067) and may be said on the whole to range fairly high. It is, however, lower than that recorded in some countries and need not be regarded as in any way exceptional. Professor Conrad in his *Grundriss zum Studium der Politischen Oekonomie* tells us that in Europe the excess seldom rises above 1,080 male to every 1,000 female births, and seldom falls below 1,030. Of the deaths registered during the same decade 589,558 were those of males and 470,551 those of females, that is to say, for every 1,000 deaths of females registered during the ten years in question there were registered the deaths of no less than 1,252 males. It is a well established physiological fact that the stronger suffers from a higher rate of mortality than the weaker sex, and therefore an excess of male over female deaths is to be looked for. The disparity would not, however, have been nearly so great had normal social conditions prevailed in the area in question. As it is, the fact that the preponderance is unusually high is due largely, if not solely, to the presence in Lower Burma of an exceptionally large number of males, indigenous and non-indigenous. This one-sided addition to the population is so disturbing a factor, and the figures on which the ratios are based are so far from perfect, that it seems useless to speculate on what the proportion between the deaths of the two sexes would be in Lower Burma if conditions were normal, but, looking at the birth figures, which are not affected by immigration, there seems no reason to think that it would be anything out of the common.

Civil condition.

78. No new feature was introduced at the 1901 census into the system of classification by civil condition. The three-fold division of the people into married, unmarried and widowed was adhered to. In the spirit of the instructions published at the 1891 enumeration, orders were issued to the enumerators to treat all divorced persons as widowed, not as married or unmarried. The question of how to classify the divorced is always a somewhat difficult one, but, so far as this province is concerned, their treatment as widows or widowers, as the case may be, is quite unexceptionable.

Remarriage after divorce is extremely common in Burma, and divorce is, in the eyes of the people, so far less serious a step than in Europe that there is every reason for believing that divorced persons who had a second time ventured on matrimony practically always returned themselves as married and not as divorced when questioned by the enumerator, so that the totals of widowed shown in the tables probably represents very little over and above the population who have actually been bereft by death of their wives or husbands.

Marriage in Burma.

79. Volumes might be written about marriage among the inhabitants of Burma. It must suffice here to touch upon one single point which, in view of certain questions that have been put to Provincial Superintendents of Census by the Census Commissioner for India, seems to need to be emphasized. That is the absolutely secular nature of the marriage ceremony. Religion plays as poor a part in it as does the tender passion in the unions of the great bulk of the inhabitants of India proper; no interval separates the ceremony from the date on which conjugal relations commence, so that when we are asked in Burma to ascertain and report what seasons are deemed propitious for marriages, by what considerations these seasons are determined in each case, and what periods are regarded as favourable for the commencement of married life, our reply must be that the Burman no more selects a special period for marrying or for consummating his marriage than he does for drafting a lease or filing a law-suit. When the promptings to matrimony come he gets married, and is done with it. The questions alluded to possess, no doubt, considerable interest if we are to believe that the place in the calendar assigned to the marriage season affects the sex of the children born into a given community. It is unfortunate that they admit of no reply in Burma.

Percentage of unmarried, married and widowed to total population.

80. Below are given, side by side, the proportions borne by the representatives of the three civil conditions in each sex to the total population whose ages were recorded at the last two enumerations—

	1891 percentage.	1901 percentage.
Male, unmarried	28·4	28·8
Female, unmarried	24·8	25·0
Male, married	20·1	20·0
Female, married	18·6	18·7
Male, widowed	2·4	2·2
Female, widowed	5·7	5·3
Total ...	100·0	100·0

The actuals on which these percentages are based are large enough to be of considerable statistical value. Looked at as whole, the figures carry on their face an indication that marriage is not now quite so freely resorted to as it was a decade back, for, in the case of both sexes, the percentage of the unmarried has risen to an extent which cannot be wholly accounted for by an improvement in the birth-rate during recent years. Among the males this increase is counterbalanced by a slight reduction in the married and by a proportionately rather larger fall in the tale of the widowers. Among the females on the other hand, wives, like spinsters, are more numerous now than in 1891, and the whole of the relative increase in the case of the unmarried and married has to be met by the widows, in whose ranks there is a sensible diminution. Leaving out of consideration the fluctuation in the birth and death rates, regarding which we have nothing of real utility on record, the inference to be drawn from these percentages is that, among the men, remarriage is somewhat commoner than it was ten years ago, but that the increase in second marriages is not sufficient to counteract the diminution in the total of husbands caused by the greater reluctance of the bachelors of Burma to enter the married state; whereas, among the women, though matrimony is not so readily embarked on by spinsters as heretofore, the greater willingness of widows to remarry has prevented the proportion of wives from dropping below the 1891 level.

Civil condition by sex and age-periods.

81. The working of the above social phenomena is brought out in rather greater detail by the figures contained in Subsidiary Table No. IVC, which shows the distribution by civil condition and main age periods of 10,000 of each

sex at the last two enumerations. The increase, in the case of both sexes, in the number of married children of between ten and fifteen years of age is indicative merely of the increase in the total of Indian immigrants in the province. For the population of between 15 and 25, that is to say, among those persons who have arrived at an age at which the majority of first marriages have been contracted in Burma, there is a marked falling off among the married men and only a slight increase among the married women. By the time the 25—40 age-period has been reached the married males have risen again in number. Here we may claim to see the operation of prudential motives, which tend to defer the marriage day to a more and ever more mature age, but the very appreciable decrease among the widowers in this age-period shows also that a portion of the difference between the proportions per 10,000 for the two enumerations must be put down to re-marriages. Exactly the same may be said regarding the female figures covering this space of 15 years. In the last age-period (40 and over) both widows and widowers show a proportionate falling off during the decade that is past, but the diminution is not counterbalanced by any increase among the married, for wives and husbands too have declining figures to exhibit, while the unmarried totals are practically double what they were at the previous census. For this age-period we must, therefore, presume that re-marriage has not been able to affect the totals, and may look for a possible cause of such diminutions as the figures show in a rather higher rate of mortality among those who have entered wedlock than among those who have not. In India an increase in the re-marriage of widows, such as seems to be disclosed by the above figures, would be a symptom of considerable significance. In Burma no special interest can be held to attach to the data. What is more to the point in this province is the fact that the age of marriage appears to have risen to a slight extent. On the whole, so far as they go, the percentages may be regarded as satisfactory.

Distribution by civil condition for Natural Divisions.

82. Any table showing the variation of the strength of the three civil conditions from locality to locality is in Burma of interest mainly in so far as that variation is regulated by the presence of non-indigenous immigrants whose social economy differs from that of the people of the country. Subsidiary Table No. IVD printed at the end of this chapter gives the distribution by civil condition of 10,000 of each sex for the natural divisions of the province; and though some of its columns tell us nothing, others are a clear though indirect indication of the spread of the Indian immigrant population over the land. In Rangoon city, for instance, the abnormally high proportion of married among children of between ten and fifteen years of age (53 in every 10,000 for males and 21 for females) bears indubitable testimony to the presence of foreigners among whose institutions infant marriage plays a prominent part. Similarly, the higher ratio of males in the prime of life in Lower than in Upper Burma speaks to the immigration of able-bodied workers from Madras and Upper Burma into the Southern areas of the province.

Civil condition by age for indigenous races.

83. Imperial Table No. VII, giving, as it does, data for each of the principal religions of the province, will furnish the reader with a fairly adequate conception of the civil condition of the indigenous population on the one hand and of the foreign immigrants on the other. Religion is, however, after all, not altogether a reliable test of nationality in Burma, and perhaps the most profitable statistics regarding marriage among the people with whom we are most intimately concerned, namely, the natives of the soil, are to be gathered from the columns of Imperial Table XIV, which gives the civil condition by age for 50,000 of each sex for the principal indigenous races of Burma, the Burmese, the Shans, the Chins, the Karens and the Kachins. The main object of the table, as originally prescribed, was to throw light on the prevalence of infant marriage, the extent of the prohibition of widow re-marriage and the prevalence of female infanticide. None of these are questions that can be regarded as in any way burning in Burma, and at first sight the utility of the figures in this province seemed to me problematic. The Census Commissioner, however, pointed out that it was a pity to miss this opportunity of obtaining in Burma data by which to measure the effect of the arbitrary matrimonial systems which prevail in India, and accordingly the table was

adopted in a somewhat modified form. Subsequent facts have amply demonstrated the wisdom of Mr. Risley's suggestion. When discussing the value of the table comparatively early in the operations, I had not had an opportunity of studying the question of the extent to which endogamy and exogamy prevailed in Burma. Since then, however, I have gone into this interesting subject as fully as the limited time at my disposal has allowed, and have summarized the few facts on the subject that I have collected from various sources at the end of Chapter VIII of this volume. Briefly put, it appears to be the case that while in the plains endogamy and exogamy may be said to be non-existent, among the hill tribes, both to the east and to the west of Burma proper, custom has placed considerable restrictions on marriage. For an outline of the nature of these restrictions I would refer to the paragraph in question. It will be interesting to consider whether any of these matrimonial limitations have left any impress on the figures in Table XIV. In the case of the Kachins and the Karens they would certainly seem to have done so. It is true that the Karens selected for exhibition in the table were for the most part not of the classes among whom the *Upper Burma Gazetteer* teaches us endogamy is more than ordinarily rampant. For them, unfortunately, we have no figures relating to civil conditions, as in the main they inhabit the "estimated" areas of Karenni. Still I believe that a certain proportion of endogamists have been included in the 100,000 Karen males and females whose age and civil condition have been shown in Table XIV. Both in the case of males and females the total of married Karens and Kachins in every 50,000 of each sex is very much below the corresponding figures returned for the Burmese and Shans respectively, as the following figures will show:—

	Males.	Females.
Burmese	21,074	20,900
Shans	20,382	20,169
Karens	16,868	18,179
Kachins	18,310	16,498

I believe that we have here an actual demonstration of the effect produced by their marriage customs on the two first named indigenous races. After a perusal of the above figures, and knowing what we do know of our Western Hill tribes, it comes more or less as a surprise to learn that the Chin totals (21,764 males and 23,352 females in 50,000 of each sex) are higher than the Burmese and Shan. Taken on a proportion only of the total population, the data cannot of course have the same weight as if they had been calculated on the population as a whole. I believe, however, that the numbers are large enough to warrant a belief that, as a rule, the Chin, unlike the Karen and the Kachin, is not deterred from matrimony by any limitation of the area from which he is allowed to select a consort. It is somewhat strange that in polygamous races like the Burmans, the Shans and the Kachins, the proportion of married females in a lakh of persons selected at random should be lower than that of married males. Mr. Eales has, however, in his 1891 Report, already commented on the fact that polygamy can hardly be said to have left any appreciable mark on the census returns, and in communities where the marriage tie is so loose and connubial relations are so haphazard as among the hill tribes of Burma, it is almost impossible to predicate with any certainty the outcome of an enumeration of the married by sexes. One thing that Imperial Table No. XIV seems to make clear is that marriages are not as a rule contracted at so early an age among the less civilized hill folk as among the Burman population proper, and that in respect of immature unions, the Shan figures approximate those for the Chins, Karens and Kachins more closely than they do those for the Burmese.

SUBSIDIARY TABLE NO. IVA.

Unadjusted Age return of 100,000 of each sex.

Age.	Male.	Female.	Age.	Male.	Female.	Age.	Male.	Female.
0 ...	2,357	2,625	35 ...	2,622	2,446	70 ...	985	1,518
1 ...	2,155	2,280	36 ...	1,009	961	71 ...	199	204
2 ...	2,903	2,839	37 ...	1,032	936	72 ...	156	167
3 ...	3,329	3,257	38 ...	898	824	73 ...	196	175
4 ...	2,755	2,698	39 ...	639	554	74 ...	80	111
	13,499	13,699		6,200	5,721		1,616	2,175
5 ...	3,198	3,145	40 ...	2,445	2,461	75 ...	352	451
6 ...	2,540	2,365	41 ...	577	641	76 ...	117	93
7 ...	2,645	2,354	42 ...	804	815	77 ...	120	109
8 ...	2,442	2,339	43 ...	687	781	78 ...	78	113
9 ...	1,974	1,857	44 ...	537	488	79 ...	42	50
	12,799	12,060		5,050	5,186		709	816
10 ...	3,575	3,315	45 ...	2,022	1,958	80 ...	332	522
11 ...	1,605	1,639	46 ...	637	654	81 ...	41	47
12 ...	2,473	1,931	47 ...	736	771	82 ...	31	40
13 ...	2,212	1,430	48 ...	622	625	83 ...	27	31
14 ...	1,756	1,901	49 ...	370	359	84 ...	14	14
	11,621	10,216		4,387	4,367		445	654
15 ...	2,320	2,357	50 ...	2,010	2,360	85 ...	71	83
16 ...	1,454	1,640	51 ...	501	534	86 ...	21	22
17 ...	1,734	1,988	52 ...	552	576	87 ...	13	14
18 ...	1,725	1,597	53 ...	473	491	88 ...	8	10
19 ...	1,163	1,242	54 ...	297	356	89 ...	4	7
	8,396	8,824		3,833	4,317		117	136
20 ...	3,210	3,426	55 ...	1,204	1,287	90 ...	53	123
21 ...	1,034	1,056	56 ...	624	570	91 ...	3	3
22 ...	1,149	1,214	57 ...	475	508	92 ...	4	4
23 ...	1,360	1,439	58 ...	375	368	93 ...	3	3
24 ...	1,156	984	59 ...	217	220	94 ...	...	2
	7,909	8,119		2,895	2,953		63	135
25 ...	2,879	3,086	60 ...	1,506	1,908	95 ...	11	14
26 ...	1,358	1,238	61 ...	362	357	96 ...	...	2
27 ...	1,432	1,194	62 ...	405	439	97 ...	1	...
28 ...	1,368	1,295	63 ...	393	393	98 ...	2	4
29 ...	996	1,078	64 ...	239	233	99 ...	...	1
	8,033	7,891		2,905	3,330		14	21
30 ...	3,578	3,443	65 ...	748	913	100 ...	1	5
31 ...	930	805	66 ...	247	270	101 ...	...	1
32 ...	1,192	1,129	67 ...	388	405	102 ...	1	1
33 ...	1,206	1,232	68 ...	200	186	103 ...	1	2
34 ...	941	881	69 ...	76	108	104 ...	...	...
	7,847	7,490		1,659	1,882		3	9
						Grand Total ...	100,000	100,000

SUBSIDIARY TABLE No. IVB.

General proportion of the sexes, by Natural Divisions, Districts and Cities.

Natural divisions, districts and cities.	FEMALES TO 1,000 MALES.			
	1901.	1891.	1881.	1872.
1. Myitkyina	737	752	...	...
2. Ruby Mines	819	613	...	...
3. Bhamo	915	500	...	...
4. Upper Chindwin	1,003	985	...	...
5. Pakôkku Chin Hills	1,003	...	...	...
6. Northern Shan States	1,006	...	...	...
7. Chin Hills...	1,020	...	...	...
8. Southern Shan States...	1,023	...	...	...
9. Katha	1,037	938	...	...
UPPER BURMA, WET ...	987	828	...	...
1. Mandalay	999	1,034	...	...
2. Yamèthin	1,020	996	...	...
3. Kyauksè	1,037	1,017	...	...
4. Magwe	1,071	1,043	...	...
5. Minbu	1,088	1,099	...	...
6. Meiktila	1,119	1,130	...	...
7. Pakôkku	1,124	1,123	...	...
8. Sagaing	1,139	1,151	...	...
9. Shwebo	1,140	1,121	...	...
10. Myingyan	1,143	1,135	...	...
11. Lower Chindwin	1,266	1,292	...	...
UPPER BURMA, DRY ...	1,113	1,111	...	...
1. Akyab	797	807	771	867
2. Hanthawaddy	816	813	744	788
3. Amherst	831	822	727	716
4. Thôngwa	853	841	864	917
5. Pegu	854	849	807	858
6. Thatôn	906	903	1,093	1,078
7. Myaungmya	908	942	956	1,047
8. Mergui	918	901	929	934
9. Bassein	919	932	913	933
10. Salween	944	903	935	933
11. Northern Arakan	959	941	942	837
12. Sandoway	978	978	954	952
13. Tavoy	1,015	1,039	1,034	1,017
14. Kyaukpyu...	1,082	1,049	1,005	974
LOWER BURMA, LITTORAL ...	875	877	866	904
1. Toungoo	944	931	835	822
2. Tharrawaddy	968	980	939	997
3. Henzada	1,006	992	991	1,058
4. Thayetmyo	1,015	993	942	928
5. Prome	1,050	1,032	996	983
LOWER BURMA, SUB-DELTAIC ...	997	990	951	971
BURMA (RURAL) ...	980	974	897	929
1. Rangoon City	419	445	466	583
2. Mandalay City	964	1,041	...	...
BURMA (WHOLE) ...	962	959	877	914

SUBSIDIARY TABLE No. IVC.

Distribution by civil condition and main age-periods of 10,000 of each sex at the last two Censuses.

Age.	MALES.						FEMALES.					
	Unmarried.		*Married.*		*Widowed.*		*Unmarried.*		*Married.*		*Widowed.*	
	1901.	1891.	1901.	1891.	1901.	1891.	1901.	1891.	1901.	1891.	1901.	1891.
1	2	3	4	5	6	7	8	9	10	11	12	13
0—10	2,582	2,573	...	...	...	...	2,728	2,711	...	...	...	...
10—15	1,082	1,190	6	2	...	...	1,028	1,142	14	6	1	...
15—25	1,297	1,340	444	456	21	29	953	979	877	875	61	79
25—40	500	376	1,833	1,814	101	124	235	150	1,745	1,669	190	209
40 and over ...	185	98	1,646	1,674	303	324	157	77	1,173	1,232	838	871
Total (all ages)...	5,646	5,577	3,929	3,946	425	477	5,101	5,059	3,809	3,782	1,090	1,159

SUBSIDIARY TABLE NO. IVD.

Distribution by civil condition of 10,000 of each sex for Natural Divisions.

Natural division.	CIVIL CONDITION OF 10,000 FEMALES.														
	At all ages.			0—10.			10—15.			15—40.			40 over.		
	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
UPPER BURMA, WET.	4,607	4,048	1,345	2,597	...	...	829	12	...	1,052	2,796	330	129	1,240	1,015
UPPER BURMA, DRY.	5,058	3,673	1,269	2,634	...	...	972	7	...	1,224	2,353	245	228	1,313	1,024
LOWER BURMA, LITTORAL.	5,356	3,818	826	2,905	...	...	1,140	20	1	1,185	2,730	211	126	1,068	614
LOWER BURMA, SUB-DELTAIC.	5,259	3,770	971	2,777	...	...	1,112	12	...	1,245	2,676	247	125	1,082	724
BURMA (RURAL).	5,121	3,804	1,075	2,747	...	...	1,031	13	1	1,185	2,616	247	158	1,175	827
RANGOON CITY.	4,541	4,290	1,169	2,100	5	...	945	53	2	1,369	3,219	293	127	1,013	874
MANDALAY CITY.	4,428	3,712	1,860	2,138	...	...	927	16	2	1,179	2,467	420	184	1,229	1,438
BURMA (WHOLE).	5,101	3,809	1,090	2,728	...	...	1,028	14	1	1,188	2,622	251	157	1,173	838

Natural division.	CIVIL CONDITION OF 10,000 MALES.														
	At all ages.			0—10.			10—15.			15—40.			40 and over.		
	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.
1	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
UPPER BURMA, WET.	5,330	4,197	473	2,510	...	...	903	4	...	1,759	2,254	154	158	1,939	319
UPPER BURMA, DRY.	5,605	3,981	414	2,812	...	...	1,106	4	...	1,492	2,128	86	195	1,849	328
LOWER BURMA, LITTORAL.	5,880	3,703	417	2,543	...	...	1,128	7	...	2,002	2,237	138	207	1,459	279
LOWER BURMA, SUB-DELTAIC.	5,743	3,837	420	2,739	...	...	1,215	5	...	1,651	2,330	113	138	1,502	307
BURMA (RURAL).	5,690	3,884	426	2,645	...	...	1,100	5	...	1,762	2,227	122	183	1,652	304
RANGOON CITY.	4,372	5,312	316	951	2	...	604	21	...	2,602	3,793	104	215	1,496	212
MANDALAY CITY.	5,580	3,856	564	2,015	...	...	994	5	...	2,321	2,282	174	250	1,569	390
BURMA (WHOLE).	5,646	3,929	425	2,580	...	...	1,083	6	...	1,798	2,277	122	185	1,646	303

CHAPTER V.

EDUCATION.

Improved system of educational classification.

84. In Chapter VII of his Report Mr. Eales has dwelt at some length on the unsuitability of the educational classification adopted at the 1891 Census, namely, that which divided the population into (1) literates, (2) learners and (3) illiterates. The anomaly of a system which places the advanced student on a lower educational level than the ploughman who has just—but only just—the requisite smattering of the first two of the three R's, and which has produced figures so unreliable as those adverted to by Mr. Maclagan in Chapter VII of the Punjab Report for 1891, is so obvious that it is hardly surprising that this threefold classification should have been discarded in 1901 in favour of one which recognizes only two educational classes, the literate and the illiterate, namely, those able and those not able to read and write. Even under the simplified system there is still boundless scope for difference of opinion as to the precise amount of reading and writing required to place an individual in the category of literates, and it is well clearly to recognize that the returns can give at best but a very superficial view of the range of education in a province like Burma where, while scholarship is uncommon, absolute ignorance of the alphabet is comparatively rare. Such as it is, however, the information contained in the schedules is far more likely to mark with accuracy the dividing line between the lettered and the unlettered now that it is possible to dismiss entirely from consideration one of the points which in 1891 left room for variety of treatment.

Impossibility of fully contrasting the figures with the figures of previous Censuses.

85. The alteration in classification, though in itself eminently desirable, detracts somewhat from the value of a comparison of the figures of the recent census with those of the censuses preceding it. Generally speaking, there would seem to be *primâ facie* grounds for assuming that those returned as "literate" at the recent census must correspond more or less roughly with the "literates" and "learners" of the 1891 enumeration, but the experience of the past shows us that the assumption may often be a rash one. It may be that ten years ago care was, as a rule, taken to include among those under instruction only those who had actually embarked on a course of tuition, but there is no warrant that here and there the expression "under instruction" may not have been construed as liberally as by some of the enumerators of Kyaukpyu who, in 1881, sanguine to a fault, took the will for the deed and treated as learners the offspring of parents who "intended at some time or other" to send their children to a school or monastery. For the purposes of comparison with other countries where the distinction between learners and literates is not preserved, Mr. Eales classed in his Report those under instruction with the literates. The Census Commissioner for India, however, inclines to the view that persons shown as "learning" at former enumerations should not be treated as literate for the purposes of the 1901 Census. This opinion has been arrived at by him after a perusal of some of the returns for the present enumeration. These would appear to show that as a rule those under tuition have not ordinarily been shown as literate, and Mr. Risley has therefore inferred that in 1881 and 1891, when learners were separately dealt with, they were still more likely to have been excluded from the ranks of the literate. For these reasons I have decided ordinarily to treat the literates of the 1901 enumeration as corresponding with the literates of the previous censuses. It will, however, always be safest to judge from the figures themselves how far such a classification is justified in a comparison with earlier returns.

Alteration of age periods.

86. There is another matter which militates against a detailed comparison of the figures for the two enumerations; that is the alteration in the age periods selected for exhibition in the table dealing specially with the education of the people as a whole—Imperial

Table No. VIII. In 1891 the periods selected for exhibition in the education table for that Census (Imperial Table No. IX) were three in number, namely, 0—15, 15—25, and 25 and over. The age periods now adopted are four, so selected as to divide the younger members of the literate population up into groups corresponding approximately to primary, secondary and higher education. They are 0—10, 10—15, 15—20 and 20 and over. The two first of the 1901 age periods combined cover the same ground as the first of the 1891 age periods, but after the age of fifteen has been passed a contrast by age periods of the figures for the recent and for the previous Census is impracticable.

Treatment of those only able to sign their names.

87. There is one more point of special importance in connection with the definition of literacy, which should be kept in view when a contrast of the returns of the last census with those of previous enumerations is undertaken. In 1891 the instructions for filling up column 12 of the Schedule for the enumeration of that year concluded with the following passage:—

> "Enter as Illiterate those who are not under instruction and who do not know how to both read and write, or who can read but not write, or can sign their name but not read."

The last eight words are those to which I would draw special attention. They exclude from the rank of literates all persons whose accomplishments with the pen and pencil extend no further than to the scrawling of their name at the foot of a petition or a receipt. This class was similarly denied admission into the literate category in 1881. The principle underlying this distinction is indicated in one of the earlier paragraphs of Chapter VI of the Census Commissioner's General Report for India 1891 in the following words:—

> "Then, again, in the present day so many messengers, porters and other menials find it to their advantage to be able to sign their names that they acquire this amount of literature without ever advancing beyond it; and it was held advisable to specially exclude this class from the category of literate."

In the 1901 instructions for filling up column 14 of the Schedule ("Literate or Illiterate") no reference was made to the treatment of these illiterate signers and the questions therefore arise; were they as a rule included among the literates at the recent enumeration and, if they were, are their totals likely to have affected the aggregate of literacy to an appreciable extent? I should on the whole be disposed to answer both questions in the affirmative. If it were a question of omitting or not omitting from the roll of literates a handful of bill collectors in the few mercantile centres of the country, it would matter but little whether persons who could sign their names and nothing more were treated as literate or not. In Burma, however, it is more than a question of a few commercial menials, for a very substantial section of the male indigenous community hovers on the border line between literacy and illiteracy and it needs often but a trifle to turn the scale one way or the other. High as is the proportion of the educated to the total population of the province, it would be vain to suppose that the lettered Burman was removed by many degrees from his unlettered countryman. The monastic curriculum is not severe and at best the literacy of the bulk of the folk is a plant of shallow growth. A few years neglect will often suffice to wither it, and it not infrequently happens that the only remnant of his early teaching left to a man who would resent off-hand the imputation of illiteracy, is found, when the matter is looked into, to be his power of appending his own signature to a document. With a keen and conscientious enumerator such an one would have been treated as an illiterate at the 1881 and 1891 Censuses, while there is nothing to show that, provided he could laboriously inscribe the letters of his name, he would not at the recent enumeration have been assumed to be capable of spelling the result and, on the strength of this performance, have been assigned a place in the dignified ranks of the literate. It is far from likely that the number added to the literate population of the province by the omission from the instructions of the eight words aforesaid is anything very great, but the facts that that omission existed and that it probably had an influence of its own upon the figures cannot reasonably be ignored.

88. Under conditions so different it is obvious that to embark upon a minute and detailed comparison of the 1891 and 1901 education figures would be mere waste of ink and paper. There is nothing, however, to be urged against our learning what we can from a few of the most salient points that strike the eye when the data for the two enumerations are placed side by side. "Compared with other provinces and even with some of the countries of Europe" writes Mr. Eales in paragraph 146 of his Report "Burma takes a very high place in the returns of those able both to read and write." The 1901 literacy figures for the whole of India are not yet available for reference, but such of the provincial data obtained at the last enumeration as are to hand give every indication that Burma will, as it did in 1891, head the list in point of education. The actual total of literates in the province on the 1st March 1901 was not much below that returned by the Madras Presidency, which has a population more than three times as numerous as Burma. In Madras the figure was 2,436,743. In this province it was 2,223,962, and of this total 1,997,074 were males and 226,888 were females. This means practically that on an average in every five persons then living in Burma one individual would have been found who was able to read and write. At the 1891 Census there were only 1,516,304 literates of the former and 89,393 of the latter sex. It is true that, in addition to these literates, there were 227,498 males and 18,226 females under tuition, but, however we decide to treat these learners of 1891 for the purposes of comparison, we cannot but acknowledge that there are unmistakeable signs of a general advance in culture during the past decade, for if we look upon those under tuition as literate, the increase since 1891 is one of 20 per cent., while, if we treat them as illiterate, the percentage of increase during the decade mounts up to no less than 39. We can accordingly say in general terms that there are clear indications of progress. Unfortunately we cannot go a step further and indicate the precise measure of advance, for the extension of the Census area precludes us from claiming even the lesser increase of 20 per cent. as a net gain due solely to the labours of our local instructors of youth during the interval of ten years. The Shan States showed only 1,239 literates and learners in 1891. It by no means follows, because in March 1901 there were 41,409 literates in the two Superintendents' charges, that anything like 40,170 new literates have been called into existence within that area during the decennium that is just over. A considerable proportion of the 40,170 persons concerned must have possessed the necessary qualifications in 1891, but, as their owners were not enumerated, these qualifications went unrecorded. When we look away from actuals to the proportional figures for education in Burma this fact that allowance has to be made for the extension of the Census area becomes more than ever apparent. The percentage of literates to the total population is still high in relation to the rest of British India, but it is by no means as high as it was ten years ago. In 1891 the Census Commissioner for India pointed out that an examination of a proportional abstract of literacy in India as a whole demonstrated the facts, first that "only 58 persons in every thousand can read and write or are learning to do so, and secondly that of those 58, 53 are males and five of the other sex." Had he then been writing of Burma only instead of the whole Indian Empire he would for 58 have substituted 243; for 53 he would have written 229 and for five, fourteen, and the merest glance at what he did write side by side with what he would in the latter event have written will suffice to show generally how extraordinarily forward Burma was in the matter of education as compared with the rest of India ten years ago. Had the date of writing been shifted on a decade, Mr. Baines would have given the proportion of Burma literates per thousand as 215, of whom 193 were males and 22 females. The last figures would seem to show a falling off, but there is nothing really discouraging in them. There is little to surprise us in an apparent diminution of even 28 per thousand when it is remembered that the vast tracts included for the first time in 1901 within the sphere of Census operations were exceptionally backward and uncultured, and added to the provincial figures nothing approaching their fair share of literates. If we assume that some of the 1891 "learners" would have failed to pass muster as "literates" had the classification been twofold instead of threefold, we shall see that the falling off is not quite so marked as 28 per thousand,

Actual increase in literacy obscured by increase of Census area.

still in any case it is beyond question that there are not now as many literate males in a given number of the population of the province as there were a decade back and that the inclusion in the operations of the Shan States and the Chin Hills is what has sent the proportion down. It may here be noted that, though the proportion of male literates has fallen, that of female literates has, in spite of adverse circumstances, risen to a higher level than in 1891. This point will be touched upon hereafter in connection with the question of female education.

Education by age periods.

89. Subsidiary Table No. V-A appended to this chapter gives the education of the population by age and sex. As I have remarked in an earlier paragraph, the alteration of the education age periods renders comparison with the data of the 1891 Census with regard to literacy by age a somewhat difficult task. The difficulty is increased by the fact that the only periods where exact correspondence of age can be attained (*i.e.*, the 1901 0—10 and 10—15 age periods as against the 0—15 age period of 1891) are the very periods in which there are the largest numbers of learners whose classification introduces an element of doubt. The returns show that of every thousand boys of under fifteen who were enumerated on the 1st March 1901 117 were literate, and that of every thousand girls of a similar age 26 were able to read and write. In 1891 the corresponding proportion in one thousand of each sex was 60 boys and 10 girls. But in addition to these literates there were no less than 134 boys and 11 girls in every thousand of each sex who were shown as learning. How many of these were really literate then and how many fell actually short of the required standard it is impossible for us now to say. Practically the only fact that we can carry away from a consideration of the figures is the significant one that, despite the addition to the Census area of the unlettered political charges, the number of literate females of under 15 in 1901 was proportionately as well as actually higher than ten years previously. The last two columns of Subsidiary Table V-A are instructive as testifying to the enormous educational advantages that are being reaped by the younger generation of females. For every thousand literate males of 20 years of age and over there are only 91 females, or less than ten per cent.; between the ages of fifteen and twenty and ten and fifteen there are 167 and 178 literate females, respectively, to every thousand literate of the other sex. This is a substantial advance for the weaker sex, but it is eclipsed by the figures for the earliest age period. In the case of literate children of under ten years of age, that is to say, among those born since the last Census who have already learnt to read and write, there are no less than 368 girls to every thousand boys, or, to put it roughly, there is rather more than one of the former to every three of the latter. It may be urged that these ratios are based on figures too insignificant in themselves to be of any great statistical value. The actuals are, it is true, not enormous, but they are quite large enough to generalize upon. They are, for male literates of under ten, 44,752, for female literates below a similar age 16,489. Such as they are they may truly be said to augur well for the prospects of female education in the province.

District proportion of literacy.

90. Not the least surprising fact that was disclosed by the figures of the 1891 Census was that of all the districts in Burma, the one in which the largest proportion of literate males was to be found was the Upper Chindwin. Mr. Eales explained the high ratio in that year by pointing out that the Shan States of Kale, Thaungdut and Kanti had been excluded from the regular census, and that the operations had in consequence embraced only the more cultured portions of the district. The experience of the last enumeration shows, however, that, even had these backward areas been comprised ten years ago in the dealings of the department, the result would probably have been very much the same as it was with these tracts omitted. Subsidiary Table No. V-C appended to this chapter shows that though the Upper Chindwin (including Kale and Thaungdut) has now to yield the first place in the matter of male literacy to Minbu, it comes a good second in the list of districts with a total of 530 literate males in every thousand of that sex. Minbu is only slightly ahead of the Upper Chindwin with 533 literate males in a similar number and Shwebo and Magwe follow it—not very closely—with 505 and 501 respectively. All these are rural, on the whole, in character. In Mandalay city the proportion

is higher even than in Minbu. It is there 573 per thousand, but nowhere else in any of the political areas selected for exhibition in Subsidiary Table V-C do we find the literate males exceeding the illiterate in number. Lower Burma can show nothing higher than 487 literates in every thousand males and elsewhere the odds in favour of literacy in any given case are lower still than in Thayetmyo, which returns the Lower Burma maximum. It seems hardly conceivable in this age of progress that a remote unfavoured stretch of country like the Upper Chindwin should be able to boast of a higher proportion of literates not only than the more accessible areas of Upper Burma but even than Rangoon city. Such, however, strange to say, is the case. In Rangoon only 410 of every thousand males were returned on the 1st March 1901 as able to read and write. There are as many as eight rural areas in Upper Burma capable of showing better figures than this. It must not be supposed that the educational standard in these eight districts is any thing very imposing. It is probably very much the reverse. Still, as they stand in Subsidiary Table V-C, the figures speak volumes for the general diffusion of the elements of culture through the length and breadth of the province. The superiority of Upper over Lower Burma in the matter of literacy is a theme on which both Mr. Copleston and Mr. Eales have had something to the point to say and it is only right that the Upper Burman *pôngyi* should have received his meed of praise for his share in the labours of the past. At the same time it must be borne in mind that one of the reasons for the strangely low proportion of literates in Rangoon and other parts of Lower Burma is to be found (as my predecessor has already pointed out) in the crowds of unlettered immigrants whom the prospect of work has attracted from India to these shores. If the foreign element is eliminated, the Lower Burma figures for education tend to approximate to those for Upper Burma. It is not the Indian immigrant alone, however, who reduces the average. Education is at its lowest in the Chin Hills, Salween and Northern Arakan, and in the Shan States the literacy figures are very far from high, so low indeed that it seems likely that more than ten years must elapse before figures as high as the 1891 proportions of literacy for the province as a whole can again be recorded.

Female education.

91. If Rangoon is low in the list in regard to male education it must indubitably be yielded the palm in the matter of female literacy. Its ratio of 268 literate females per thousand takes a place far above anything that the other portions of the province can show, and need not shirk comparison with some of the figures for European countries, such as, for instance, of Italy, where more than 50 per cent. of the females married during 1898 were illiterate. But even outside Rangoon the female figures of proportion are not by any means minute. Mandalay city shows 126 and Hanthawaddy (which, as we know, is wholly rural in character) 110 literate females in every thousand of that sex while Pegu has a ratio of only a little below 10 per cent. In the Lower Burma littoral division, which includes uncivilized areas like Northern Arakan and Salween, there are 66 literates in every thousand females and the proportion for Lower Burma is the same as for the coast districts. In the province as a whole we find that 45 out of every thousand females are able to read and write. When we remember that ten years ago only 24 females in a thousand were literate, that the "learning" and "literate" females together then only averaged 29 in a thousand and that the proportional increase of at least sixteen per thousand has been effected in spite of a vast accession of illiterate folk to the population on which the ratios are calculated we may hold out golden hopes for the future of female education in Burma. Events have justified the forecast embodied by Mr. Eales in paragraph 151 of his report. The "number of literates among women" has been "much increased," possibly to an even greater extent than my predecessor anticipated.

Education by religion.

92. The subsidiary table showing the proportional figures of education by the main religions (Table V-B) emphasizes a fact indicated above, namely, that the foreign immigrants from India have effected the ratio of literacy in the province to a very appreciable extent. The Animists are actually the most uneducated of the religious classes dealt with, for they can only claim 48 male and 2 female literates in 1,000 of each

sex concerned, but the Musalmans are, if allowance is made for the fact that their share of adults is disproportionately large, not very much better with their total of 194 males and 39 females. The Hindus show a slightly larger proportion of literates per thousand than the Muhammadans, and in the matter of female education run the Buddhists very close, but their males are proportionately as well as actually far behind the Buddhist males. They can only show 207 literate males per thousand against the Buddhists' 410, this latter figure being, it will be observed, very nearly double the Hindu ratio. In male literacy the Buddhists are not far behind the Christians, who have returned 423 men and boys able to read and write in every 1,000 of the stronger sex, but in female literacy they compare but poorly with the last-named class. For the Buddhist 44 literate females per thousand the Christians are able to exhibit a proportion of 243, the actual figure being 16,732. These returns show how large a share in the high figure for female literacy is to be ascribed to the Christian population and bear indirect testimony to the important part played by the Missionary bodies in the work of education of the province.

Literacy by race.

93. The above figures give a general idea of how the indigenous compares with the foreign population in the matter of education. Further particulars regarding the literacy of the principal races of the country, the Burmese, the Karens, the Kachins, the Shans the Chins and the Talaings can be gathered from Imperial Table No. IX, and Subsidiary Table No. V-D appended to this chapter. In point of education as a whole the Burmese outstrip all the other indigenous peoples with 270 literates in every thousand of their number. In male education too they are far ahead of the other communities. It can almost be said that every second Burman boy or man is able to read and write, for the proportion of literates per thousand of the sex is no less than 490. On the other hand among girls and women the Talaings are able to display the highest proportional figures of literacy, 62 per thousand against the Burmese 55 and the Karen 37. In vernacular education the Karens make a comparatively poor show, but, when it comes to literacy in English, their 33 males and 12 females in every ten thousand of each sex show them to have outdistanced all the other competitors. In every ten thousand Karens (male and female) there are 23 who are able to read and write English, whereas in a similar number of Burmans and Talaings the proportion is eleven only. If the figures in Subsidiary Table No. V-D are to go for anything the Chin would appear to show more aptitude for letters than the Kachin. On this point, however, we shall be better in a position to speak authoritatively in 1912 than now.

Literacy by languages known.

94. In the colums of Imperial Table No. VIII are shown particulars regarding the languages in which the population enumerated were literate. These may be divided roughly into three classes, firstly the vernaculars of the province that have been reduced to writing, secondly all other languages except English that have been reduced to writing and thirdly English. There being no real administrative need for giving full details of all non-indigenous tongues, languages of the second class have been lumped together in columns 19 and 20 of the table, and a foot-note has been placed at the bottom of each page showing what languages have been included in those two columns so far as that page is concerned. The only indigenous languages in which literacy is possible are four in number, Burmese, Shan, Karen and Talaing. The total of literates in each of these has been indicated in columns 11 to 18 of the table. The last two columns of the table show how many males and females were literate in English, the only foreign tongue of sufficient importance to merit special treatment. The total number of persons literate in Burmese was 2,061,826 or 19·8 per cent. of the total population enumerated on the schedules ; those literate in Karen reached an aggregate of 15,225 ; while those who could read and write Shan and Talaing amounted to 21,150 and 12,024, respectively. A detailed record of literacy by language was not attempted at the 1891 enumeration, and so no comparison of the above with the figures of that census is practicable. I would here only point out that, for the reasons given by Mr. Christie in his report on the operations in the Henzada district, which finds a place in the Appendix to this

volume, it is probable that the figures for Karen do not give a real indication of the extent to which this language is read and written in Burma. The literates in English were 32,165 males and 6,622 females, as compared with 15,554 males and 3,479 females returned as literate in English in 1891. This means that six males and one female in every thousand of each sex in Burma can now read and write English. The figures for males are, it will be seen, more than double what they were ten years ago, those for females are nearly double. Subsidiary Tables Nos. V-A, V-B and V-C give a general idea of the manner in which this knowledge of English is distributed over the population. Of religions, Christianity naturally claims the highest proportion of those literate in English, 139 out of every thousand Christians knowing how to read and write the language. Among Hindus, 14 in every thousand have English qualifications; the rates for Musalmans is only half that of the Hindus (7), while that of Buddhists and Animists is only one per thousand. The figures for "Other Religions"—71 per thousand for males and 94 per thousand for females—are peculiar, but the totals on which they are based are too small to be of any great statistical value. The returns showing literacy in English by age-periods contain nothing particularly suggestive. The proportion of English scholars in the earliest age period 0—10 is, according to Table V-A, one per thousand in the case of each sex. Imperial Table No. VIII tells us that the actual figures are 1,383 boys and 794 girls, and that the bulk of these youthful literates (who of course have, strictly speaking, barely earned the title) are Christians. By the time the age of fifteen has been reached the ratio has risen to five per thousand in the case of males and the close of five years more sees the men's figure at 9 per thousand. After that there is naturally enough a decline.

No comparison of census with departmental figures.

95. A special attempt was made on the occasion of the 1891 enumeration to contrast the returns of literacy obtained by the Census Abstraction office with the figures relating to education recorded by the Education Department. Theoretically the idea was excellent, but in practice it was found that but little profit accrued from the comparison, even when the "learners" were classified apart from the literate and the illiterate. Now that the above distinction is no longer drawn the whole *raison d'être* of the contrast disappears, and it has therefore been decided not to undertake it in connection with the 1901 figures.

SUBSIDIARY TABLE NO. V-A.

Education by Age and Sex.

Age period.	Number in 1,000.													Females to 1,000 males.	
	Literate.			*Illiterate.*			*Literate in Burmese.*		*Literate in other languages.*		*Literate in English.*				
	Total.	Males.	Females.	Total.	Males.	Females.	Males.	Females.	Males.	Females.	Total.	Males.	Females.	Literate.	Illiterate.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0—10	22	33	12	978	967	988	31	11	2	1	1	1	1	368	1,038
10—15	193	315	61	807	685	939	300	57	14	3	3	5	2	178	1,264
15—20	275	485	77	725	515	923	455	71	28	4	5	9	2	167	1,895
20 and over	304	537	53	696	463	947	495	49	39	3	5	8	1	91	1,901
Total ...	215	378	45	785	622	955	350	41	25	2	4	6	1	114	1,478

SUBSIDIARY TABLE NO. V-B.

Education by Religion.

Religion.	Number in 1,000.								
	Literate.			*Illiterate.*			*Literate in English.*		
	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.
1	2	3	4	5	6	7	8	9	10
Buddhist	224	410	44	776	590	956	1	2	...
Animist	27	48	2	973	952	998	1	2	...
Hindu	179	207	42	821	793	958	14	17	3
Musalman	139	194	39	861	806	961	7	11	1
Christian	339	423	243	661	577	757	139	186	85
Other religions	465	521	180	535	479	820	75	71	94

SUBSIDIARY TABLE No. V-C.

Education by Districts and Natural Divisions.

District.	Number in 1,000			
	Literate.		*Illiterate.*	
	Male.	Female.	Male.	Female.
1	2	3	4	5
Upper Chindwin	530	20	470	980
Katha	399	20	601	980
Myitkyina	286	21	714	979
Ruby Mines	285	25	715	975
Bhamo	224	24	776	976
Northern Shan States	97	3	903	997
Southern Shan States	69	3	931	997
Chin Hills	23	1	977	999
Upper Burma, Wet ...	**174**	**9**	**826**	**991**
Minbu	533	35	467	965
Shwebo	505	19	495	981
Magwe	501	16	499	984
Sagaing	482	30	518	970
Pakôkku	468	23	532	977
Myingyan	450	24	550	976
Mandalay (rural)	422	27	578	973
Lower Chindwin	407	18	593	982
Yamèthin	391	20	609	980
Kyauksè	354	23	646	977
Meiktila	331	17	669	983
Upper Burma, Dry ...	**446**	**23**	**554**	**977**
Mandalay city	573	126	427	874
Upper Burma ...	**351**	**22**	**649**	**978**
Hanthawaddy	483	110	517	890
Thôngwa	468	81	532	919
Pegu	450	92	550	908
Myaungmya	428	72	572	928
Bassein	414	75	586	925
Sandoway	343	32	657	968
Kyaukpyu	338	29	662	971
Mergui	333	55	667	945
Tavoy	313	44	687	956
Akyab	286	34	714	966
Amherst	261	56	739	944
Thatôn	235	41	765	959
Northern Arakan	55	5	945	995
Salween	51	6	949	994
Lower Burma, Littoral ...	**373**	**66**	**627**	**934**
Thayetmyo	487	38	513	962
Tharrawaddy	484	62	516	938
Henzada	477	54	523	946
Prome	449	41	551	959
Toungoo	356	50	644	950
Lower Burma, sub-deltaic ...	**455**	**50**	**545**	**950**
Rangoon city	410	268	590	732
Lower Burma ...	**399**	**66**	**601**	**934**
BURMA—WHOLE ...	**378**	**45**	**622**	**955**

SUBSIDIARY TABLE NO. V-D.

Literacy of principal indigenous races.

Race.	NUMBER IN 1,000						NUMBER IN 10,000		
	Literate.			*Illiterate.*			*Literate in English.*		
	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.
1	2	3	4	5	6	7	8	9	10
Burmese ...	270	490	55	730	510	945	11	20	2
Shan ...	79	152	9	921	848	991	1	2	...
Karen ...	91	143	37	909	857	963	23	33	12
Chin ...	25	48	2	975	952	998	1	1	...
Kachin ...	8	14	2	992	986	998	...	...	...
Talaing ...	211	357	62	789	643	938	11	19	3

CHAPTER VI.

THE LANGUAGES OF THE PROVINCE.

Tones in the languages of the Province.

96. Indubitably the most interesting and suggestive portion of Mr. Eales' Report on the 1891 Census is that which he devotes to a consideration of the languages of Eastern Asia and of the correct method of their classification. The special point that he has laid hold of and there emphasizes is the fact that the feature of all others which characterizes the tongues of China and Further India (the Indo-Chinese language family) as a whole is their use of tones. So important does he consider this distinction to be that he has elected to divide the languages of this portion of the Continent, according as they use or do not use tones, under two main heads, namely, (*a*) polytonic and (*b*) monotonic. To the monotonic class he assigns the Aryan, Semitic and Dravidian families ; to the polytonic the languages of China and those of the Indo-Chinese Peninsula generally.

The question of tones is not one that appeals ordinarily to the modern philologist, who has perforce to deal with all sorts and conditions of tongues that he has never heard and is never likely to hear spoken, and it appears to me doubtful whether the part played in language by tones will ever be given by theoretical scholars the regard to which, in the estimation of those who have made a special study of the so-called tonic languages on the spot, it is entitled. This may or may not be the case ; the fact remains that tones are a radical characteristic of the languages with which we have in Burma to deal, and that, by bringing the fact into special prominence in his admirable language chapter, Mr. Eales has contributed materially to a full and intelligent comprehension of the forms of speech found in the province. There is a great work to be done still in Burma in the way of classifying the vernaculars, and the greater or less degree to which tones enter into their composition will in some cases assist in determining the proper place to be assigned to hybrid or doubtful forms.

Any attempt to accurately define "tone" for the purposes of the above classification would entail the examination of a number of exceedingly complex questions, and it may be well to premise at the outset that for those purposes the word "tone" must be given its widest and most liberal interpretation. If this is not done, it may well be argued that many of the members of the "polytonic" class are not "tonic" at all. So far as it is possible to define a tone in Chinese without actual oral demonstration, this has been done by Sir Thomas Wade in the opening chapter of his Tzŭ Êrh Chi. Talking of the *yin*, or monosyllable, he says—

"Of this *yin* there are, however, subordinate divisions, the *shêng*, which we translate tones, keys in which the voice is pitched and by which a variety of distinctions is effected, so delicate as to be retained only after long and anxious watching by the foreign ear.

"The term 'tone' has been so long accepted as the equivalent of the Chinese *shêng* that it may be hardly worth while attempting to disturb the usage. It might be notwithstanding rendered with greater propriety '*note*' in a musical sense, although no musical instrument to my knowledge is capable of exhibiting more than an approximation to the *shêng*. Doctor Hager in his folio on the elementary characters of the Chinese language (1801) has tried to give an idea of the *shêng* as musical notes."

In another place he writes—

"I write the *shêng* of the syllable *pa*, accordingly as follows:—

$pa^1\ pa^2\ pa^3\ pa^4$.

"The sounds of the syllables repeated in the above order form a sort of chime, which can only be learned by the ear."

"Pitch" and "stress" tones.

97. Here the whole conception of tone is indicated in the expression "chime." What may almost be called a musical idea underlies the whole. This musical or "pitch" tone, unmistakable when once heard, comes at one end of the scale, at the other comes the "stress" tone, represented in many modern languages by the accent. The question then arises, what is the dividing line between the two? At what point does the pitch merge into the stress tone? By what test is one to decide whether in a

particular language a particular sound is a pitch tone or not? The answer is that there is no test but the ear, and it follows that, when the distinctions are, as they very frequently are, extraordinarily subtle, the dividing line must of necessity be drawn at different points by different observers. For my own part I am very doubtful whether there are in Burmese, Talaing and Kachin any "tones" within the meaning of Sir Thomas Wade's definition, though such are indubitably present in Shan and Karen. I am aware that here I am not one with competent authorities. Mr. Lonsdale, in his recently published Burmese grammar, has gone very fully into the question of Burmese tones. He calls them the *simple*, the *checked*, and the *heavy*, and explains how they differ from accent. I must confess that his explanation still leaves me doubting. As I hear the sounds, pitch does not enter into their composition. In fact I consider it questionable whether, if Chinese, Shan and Karen had been unknown to scholars in Burma, there would ever have been any talk of tones in Burmese. The existence of tones in Talaing has been so disputed that it seems clear that those that exist are not such as force themselves on the ear. I am given to understand too that in Kachin "pitch" tones are non-existent. In Chin the number of tones is, according to Mr. Houghton, three, but it appears that little or no inconvenience is caused by amalgamating the three into two. Moreover, the difference between these two tones seems barely more marked than between the two "oo" sounds in the words "foot" and "boot." So far as I can gather, there is here no inflection of the musical pitch such as arrests the hearer when listening to Chinese and Shan, and I am inclined to hold that, had there been no Sinitic analogy, the tonal element in Chin would not have been recognized as differing in quality from those variations of sounds which are indicated by accents.

It may be argued of course that "stress" as well as "pitch" tones should be allowed into the tone scheme. The question then will be when does the stress tone become an accent proper; if the absence of pitch is no criterion, where do tones end and accents begin? and new matter for argument is created. It is useless venturing on this disputable ground. If, as I have already stated, it is understood that "tone" is used in its most catholic sense, all the languages with which we are concerned can be denominated polytonic and for the purposes of classification a comprehensive term of this kind is useful.

98. Professor Forchhammer, in the Essay on Indo-Chinese languages contributed by him to the *Indian Antiquary*, writes as follows of the position which in these languages the tonal system assumed towards words borrowed from foreign tongues:—

"The Chinese, we have seen, devised means, by transliterating Sanskrit words with Chinese graphic signs and pronouncing them as such, which deprived foreign elements of all disturbing influence upon tonal inflection. Talaing, Burmese, and Shan, partly because fettered by Indian alphabets, were forced to grant important concessions to intruders. Shan assigned to all borrowed words, whether Aryan or Burmese, the deepest, dullest tone, to some unaccented syllables, suffixes and affixes, the short jerking fifth tone. * * * Thus the Shan limited the destructive influence of foreign atonal words by apportioning to them a fixed position in the tone scale. Talaing and Burmese made no similar provisions and this neglect resulted in the decomposition of their tonal system."

The last sentence would appear to indicate that Talaing and Burmese had once been more tonic than they now are, and it would be interesting if it could be shown that this were the case. If it were so, the process by which tones were discarded would be rightly described as one of recuperation rather than of decomposition or disintegration, that is, if the more recent theory in regard to the origin of tones is correct.

Origin of tones.

99. On this last point the views of philologists appear to have been modified of recent years. In his 1891 report Mr. Eales, elaborating an idea thrown out by Mr. Cust, is of opinion that the use of tones marks "the radical stage through which all languages have passed or in which those that are still tonic have been stereotyped." He says:—

"To use a simile which exactly conveys our meaning, the savage, having but few sounds, was forced to make as many words as he could out of the sounds he possessed by uttering the sounds in different tones, like Paganini, who could play on one string of his violin."

This is practically the position taken up by a far earlier scholar, Logan, who in his scholarly *Ethnology of the Indo-Pacific Islands* (Journal of the Indian Archipelago, Volume VI, Singapore, 1852) says:—

"Language is a natural and necessary attribute of the developed human intellect and organism. In its first origin it is imitative. Its sounds are entoned, chanted, varied, complex, and often harsh, like those of nature."

It cannot be denied that, with Messrs. Cust and Logan at his back, Mr. Eales has a strong case. Further research, however, appears to have led to the conclusion that another view is more probably correct. In his *Ethnology* Professor Keane states that, just as monosyllabism is not a necessary condition of primitive speech, so—

"It is now clear that tone gives no support to the theory of a supposed primitive sing-song utterance, but that it is a compensating element, unconsciously introduced to distinguish the numerous homophones resulting from the ravages of phonetic disintegration."

Professor Keane's conclusion is, so far as he himself is concerned, based largely on his observations in regard to Chinese, where a comparison of the modern with the primitive tongue exhibits in a marked degree the phonetic decay or, as Dr. Grierson has called it, the "phonetic attrition" alluded to. The languages of Burma were doubtless never as far removed from what they now are as Terrien de La Couperie has shown Chinese in its earliest forms to have been, but the principle no doubt holds good in their case. The above theory appears to have borne the test of criticism and gained general acceptance. Mr. Houghton is even more out-spoken than Professor Keane. He looks upon tones in the Indo-Chinese languages as an unmistakable sign of degeneracy, talks of them as a "disease of speech" and gives as a probable explanation of their coming into being the soft and luxurious nature of the climate in which the chief members of this family found themselves. Holding this view, one would logically be bound to regard the reversion by means of synonyms and the like to an atonic system as a symptom of renewed virility rather than of decay. No doubt, however, a number of factors have been at work.

The morphological order.

100. The morphological order in which the languages of the province find a place is the "isolating." It must not be forgotten, however, that there are few, possibly none, of them that are entirely free from agglutinative characteristics. Agglutination is in fact so prominent a feature of Burmese that, as Mr. Eales has pointed out, Professor Max Müller has classed it, with Shan, among the agglutinative languages. In Burmese the relational particles, in so far as they possess the power to be detached and shift their places in the combined form, fulfil entirely what Professor Keane calls the "true test of agglutination." It seems to me, however, that in the languages of this class in Burma the isolating element usually proponderates over the agglutinative, and I would accordingly call the tongues with which we have to deal "isolating (tonic)" or, adopting Mr. Eales' term, "isolating (polytonic)." If, as Mr. Houghton states, all isolating languages are tonic, the latter portion of the term would appear to be redundant. Here, however, Mr. Houghton is at issue with Professor Keane, according to whom the Khassi language, though isolating, has no tones. This may mean nothing more than that Khassi is no more tonic than Burmese, still, all things considered, it will be best, in my judgment, to qualify the "isolating" in the manner suggested. *

* Since writing the preceding few paragraphs, I have received from Dr. Grierson a copy of a draft note on the Malay and Indo-Chinese families of languages in which conclusions are arrived at differing slightly from those expressed above. Dr. Grierson demurs to the use of the term "polytonic" in describing the Indo-Chinese forms of speech, first because some Indo-Chinese languages possess only one tone and secondly because, where there are more than one, they are, so to speak, an accidental feature of the language. The grounds for the first of these objections are, no doubt, sound. I have myself questioned the existence of tones proper in Burmese, Talaing and Kachin. I have, however, explained above that in dealing with the languages of the province, I am using "tone" in what is, perhaps, not its orthodox sense and including, for convenience of identification, not only tones proper but also those inflections of the voice which are not real tones but come almost within the category of rudimentary tones and have come in Burma to be spoken of as such. On the understanding, therefore, that the term "polytonic" is used in this Report in a special sense, I have decided to leave my previous remarks unaltered. I gather from another portion of Dr. Grierson's note that he considers the languages of Burma to be more agglutinative in form than isolating. I understand, however, that it is admitted that there are characteristic features of both orders in the tongues in question, and I conceive, therefore, that but little exception will be taken to my classification, which gives full recognition to this fact. Dr. Grierson divides the tones of Indo-Chinese languages into "pitch tones" and "time tones." I take it that his "time" practically corresponds to my "stress" tones.

Grouping of provincial languages.

101. In his *Upper Burma Gazetteer* Sir George Scott has split up the languages of Upper Burma into the following groups :—

(1) The Tai languages.
(2) The Chingpaw languages.
(3) The Zho, Shu or Chin languages.
(4) The Vü Rumai or Wa Palaung languages.
(5) The Karen languages.
(6) The half-bred languages.
(7) The ungrouped languages.

This grouping is tentative merely, for, as pointed out by the compiler, until M. Pavie's work on the countries lying between Tongking and the Mèkong comes out, a linguistic classification can only be provisional. Dr. Grierson has divided the isolating polytonic languages of the Indo-Chinese family into three sub-families,—(*a*) the Tibeto-Burman, (*b*) the Siamese-Chinese, and (*c*) the Môn-Annam. The only criticism he offers in connection with the language scheme adopted in the Gazetteer is in regard to the doubt therein cast upon the alleged affinity between Palaung and Talaing. In a letter forwarding a note on the Indo-Chinese and Malay languages he says :—

"You will see that I include Palaung amongst the Môn-Annam languages. Mr. Scott, in the *Gazetteer of Upper Burma*, denies this relationship. He is quite right in refusing to admit any close connexion between Môn and Palaung, but that is consistent with their both belonging to the same linguistic family, although they fall within different groups of that family."

I imagine that Sir George Scott will be prepared to bow to the authority of the Linguistic Survey in this one particular, on which he seems as yet to have formed no very decided opinion.

With this modification, and with the addition of the Lower Burma languages, which have not been specifically referred to in the Upper Burma volume, a combination of the two systems exhibits the following provincial table :—

A—Indo-Chinese family.	(1) Tibeto-Burman sub-family	(*a*)	The Burmese group.
		(*b*)	The Kachin group.
		(*c*)	The Kuki Chin group.
	(2) Siamese-Chinese sub-family	(*d*)	The Tai group.
		(*e*)	The Karen group.
	(3) Môn-Annam sub-family	(*f*)	The N. Cambodian group.
		(*g*)	The Upper Middle Mèkong or Wa Palaung group.
B—Malay family	... ...	(*h*)	The Selung language.

This includes all the strictly indigenous tongues. The non-indigenous forms of speech will be dealt with in a later portion of this chapter.

THE INDO-CHINESE FAMILY.

THE TIBETO-BURMAN SUB-FAMILY.

The Burmese language.

102. Burmese was the language ordinarily spoken by 7,006,495 people in the province on the 1st March 1901. A few of its characteristics, its agglutinative tendencies, the tonal element in its composition, and the like, have been touched upon above. I would here advert to only one further point of interest in connection with the language which has been brought into prominence of late years. I refer to the very marked phonetic decay it exhibits and the material that exists for gauging the extent of that decay. Mr. Houghton has shown us that Tibetan, or Bhotia, on the one hand and Arakanese on the other, form two excellent standards for measuring the progress of this process of decomposition. A knowledge of Bhotia is, he considers, an absolutely essential qualification for any one who would get to the bottom of Burmese etymology. A very large number of Burmese words are, he has shown us, immediate lineal descendants of the Tibetan tongue. The vocables that are shared between the two languages give a general rough indication of the period when the Burman stock broke off from the parent stem ; for instance, the radical identity of various words referring to agriculture points, as he justly observes, to the fact that before the Burmans separated from the Tibetans, the joint race of which they

were a branch, had passed from the nomadic to the agricultural state of society, while, on the other hand, the almost complete divergence in words connected with weaving proves indirectly that when the severance took place the community as a whole, though it had possibly emerged from the skin clothing stage, had made no real advance in the textile arts. Mr. Houghton has based his interesting article on the assumption that the Burmans originally came from the Tibetan plateau. As I have pointed out elsewhere, the view now prevails that the ancestors of the Burmese race never lived in Tibet, but that they, with the progenitors of the Tibetans and other races, came, as joint members of a vast Indo-Chinese immigration swarm, from Western China to the headwaters of the Irrawaddy and then separated, some to people Tibet and Assam, the others to press southwards into the plains of Burma. This later theory does not, however, affect the merit of Mr. Houghton's arguments.

103. The difference between the Tibetan and the Burman form is often very marked. Indeed, were it a matter of pronunciation only, the affinity would often be unrecognizable. By writing the Burmese words, however, not as they are pronounced, but with each vowel and consonant given its actual original value, Mr. Houghton has been able to exhibit some very remarkable resemblances. By this device he has as a rule shown how the words he uses were originally pronounced, that is to say, has exhibited them in that archaic form which Arakanese has, in a measure, preserved. In fact Arakanese in many cases shows fairly accurately not only the extent of phonetic disintegration that had crept into the language at the time of the original severance of the Arakanese from the Burmese Kingdom, but also the further stages of decomposition that must have taken place between the latter date and the present day. It is true that Arakanese in its turn has degenerated and, in certain instances, to an even greater extent than Burmese, but, taken as a whole, it may be looked upon as an interesting link between the Burmese and Bhotia languages. It was the isolation of the Arakanese, cut off by the Yomas from the rest of the Burmese-speaking population of the kingdom, that enabled them, to some extent, to protect their tongue from the fate that has befallen Burmese. Their language, which has been analysed by Mr. Houghton in an article in the Journal of the Asiatic Society, is the principal of the so-called dialects of Burmese and is the parent of several of what can best be called sub-dialects, such as the Tavoyan, the Chaungtha and possibly the Yabein. The small number of dialects in Burmese proper is remarkable, considering the inherent susceptibility of the tongue to phonetic modifications. Only when exposed to the influences of other tongues are the variations in the general form of speech noticeable. For the rest, the Burman of Mergui will understand the Burman of Myitkyina without the least difficulty, and in his turn as easily make himself understood. To the average foreigner the difference between the two forms of speech would be indistinguishable.

Arakanese.

104. Mr. Eales was, in 1891, of the opinion that at the 1901 Census it would be best if the enumerators were told to enter Burmese in the language column of the schedule, instead of Arakanese or Tavoyan, in the case of those persons who professed to speak one or other of the latter two languages, his reason being that "the result of the last two returns has shown that the dialects of Burma are gradually being absorbed into Burmese." No specific orders of this kind were, however, issued at the recent Census, and, on the whole, quite apart from non-scientific considerations, it is, perhaps, just as well that the record of dialects was maintained. The process of absorption referred to has been going on, but the figures show that Arakanese at any rate is, as a separate form of speech, dying hard, and it is a question whether the dialects may not conceivably possess a good deal more vitality than they have been given credit for. The following figures showing the number of people returning Arakanese as their "parent," or "mother" tongue, or as the "language ordinarily spoken" by them during the period 1881—1901, are a fair gauge of this linguistic conservatism:—

	No.
1881	358,559
1891	344,348
1901	383,400

It is most improbable that there has been a real increase in the number of Arakanese speaking people. I regard the totals as merely reflecting the gradual dissipation of all doubts as to the precise name to be given by the Arakanese to their special form of speech. Arakanese is bound eventually to disappear, and after another decennial Census or two it will probably be possible to calculate fairly accurately the date by which it will have vanished off the face of Burma, but the progress of its absorption will for many years to come form an instructive study, for which the periodical Census figures will afford useful data.

Tavoyan.

105. According to the returns, the Tavoyan form was spoken by only five persons at the date of the Census. This is due to the fact that the bulk of the speakers of the dialect have returned it as Burmese. Professor Forchhammer says of this form :—

"Tavoy can hardly be called a dialect of Burmese; it is distinguished from the latter by peculiar idioms which all belong to the Burmese language treasure, but have become obsolete in some localities."

And he goes on to instance a few of these idioms.

Maung Maung, *Akunwun* of Tavoy, has sent me an interesting note on the Tavoy dialect, which shows that it owes its present form not only to Arakanese settlers who are said to have immigrated into the Tavoy district on several successive occasions during the Christian era and to have left their impress on the speech of the people in the shape of an Arakanese "twang," but also, to a slight extent, to Talaing and Siamese influences. The word Tavoy (Ta-wè—တဝေး) is said by Maung Maung to mean, in Siamese, a cane station. The expressions ဆေ ("*se*") and တ ("*ta*") used by almost every cartman in Tavoy for turning respectively to the left and to the right, are, I am assured on the same authority, of Talaing origin. The local term for a goat (ဗဲ, *bè*) is totally different to the Burmese ဆိတ် (*seit*) and may be of either Môn or Siamese parentage. The basis of the language is, however, neither Arakanese, Talaing nor Siamese, but Burmese, and it is an easy matter for a Burman to master the slight dialectical differences. Maung Maung has sent me a number of Tavoyan ballads, which unfortunately I am unable to give examples of here. They are reported to be of great antiquity.

Yaw.

106. The Yaw dialect is spoken by a comparatively small community in the Yaw valley tract of the Pakôkku district. Sir George Scott has placed their tongue among the half-bred languages, but, though the Yaws themselves are probably a hybrid race, their speech seems to be pure Burmese of an old-fashioned type, and I have therefore classed them linguistically with the Burmese. In the Yaw valley the popular theory is that the divergence of tongues was due to a long course of the waters of the hill streams undergone by the Yaws. It is curious that a similar idea regarding the effect of water on the speech of the drinkers is entertained in connection with the Danus, who are said to talk slowly in consequence of potations from the streams in the valleys. As in the case of Tavoyan it is only outside the Yaw country that the existence of Yaw as a separate dialect has been recognized. The five persons shown as speaking Yaw were enumerated in the Bassein district.

Chaungtha.

107. The Chaungtha language was spoken on the date of the Census by 670 males and 665 females in the district of Northern Arakan and by nine males and six females elsewhere in the rest of the Arakan division. It appears that in 1880, when the *British Burma Gazetteer* was compiled, Chaungthas, when repeating the Burmese alphabet, were in the habit of calling some of the letters by different names to those ordinarily given, and that certain provincialisms were to be detected in their speech, but that otherwise their tongue was Burmese, or rather Arakanese. It may be presumed, I think, that before they began to descend to the plains the Chaungthas, if they are not hybrids, spoke one of the tongues of the hill tracts. Since their contact with the Arakanese, however, they have lost practically all of their original vernacular.

Yabein.

108. Yabein has not been specifically returned as the language of any portion of the population of the province. In Colonel Spearman's *British Burma Gazetteer* the dialect has been

described as "Burmese with a strong Arakanese accent," and I learn from the Report on the Settlement Operations in the Toungoo district (season 1898-99) that this strong Arakanese accent still survives as the last of the relics of this race of silkworm rearers, who are found in the Hanthawaddy, Pegu, Tharrawaddy and Toungoo districts.

Intha.

109. Round about Fort Stedman and elsewhere in the Southern Shan States and Karenni is a community known as the Inthas, who speak a dialect of Burmese largely diluted with Shan. The current theory is that the Inthas brought their tongue from Tavoy. It is said to bear traces of the Arakanese twang referred to in an earlier paragraph of this chapter. It was spoken by 5,851 people in the Southern Shan States in March 1901.

Taungyo.

110. In the borderland between the Shan States and Upper Burma Proper are several races which have not yet been afforded a definite position in any ethnical group and have hitherto been looked upon as hybrids. Two of these are the Taungthus and the Taungyos. Sir George Scott treats of them under the same heading in the *Upper Burma Gazetteer,* and to outward appearances they would seem to appertain to the same stock. Their languages differ, however, considerably. The Taungthu tongue seems almost as much a mixture as the Taungthu race. The Taungyo speech on the other hand has an obvious Burman basis that is hardly overlaid by any foreign element. There are but few Taungyo words in the vocabulary of two hundred words or so given in the *Upper Burma Gazetteer* that do not bear marks of Burman parentage. It is strange too that the Burmese that Taungyo reproduces is often not the modern form but the older tongue which has been in a measure crystallized in the Arakanese. Words like *anak* (red), *amrang* (high), *myak-sai* (eye), *lang* (light), show that the tongue cannot possibly be of recent formation. It has been included in the Burmese group. There were in all 10,543 Taungyo-speaking persons in Burma in March 1901.

Kadu.

111. The Kadu language is spoken in the western portion of the Katha district and in portions of the Upper Chindwin district abutting on Katha. It, like the people by whom it is spoken, has almost lost its identity. The problem of its origin has been referred to elsewhere, namely, in the caste, tribe and race chapter and in connection with the Sak dialect of the Arakan Yomas (*see* under the Kuki Chin language group *infra*). Pending further information, Kadu, which will very shortly be an obsolete form of speech, has been assigned a place in the Burmese group of languages. On the 1st of March 1901 it was the language ordinarily spoken by 16,300 people.

Mro.

112. The Mro tongue was the spoken vernacular of 13,414 inhabitants of Akyab and the Arakan Hill Tracts at the recent census. It has hitherto been looked upon as a variety of the Chin language. Dr. Grierson, however, has decided on examination to treat it as a member of the Burmese group. He describes it as being in many points a deceptive language, for, though it adheres generally to the phonetic system of Burmese, it at times shows marked variations from that system. There are to be found in it not only forms which indicate a Kuki-Chin origin, but also characteristics which would seem to hint at an affinity with the Bodo and Naga vernaculars. It is to be regretted that the materials available for the study of Mro are but meagre. Till further particulars are procurable, however, Dr. Grierson considers it best to class the language provisionally as a very archaic form of what has now developed into the Burmese language.

Szi, Lashi and Maru.

113. In the extreme north of the province are several communities, some numerically small, some of considerable size, who closely resemble and are practically merged into the non-Burman hill tribes among whom they live, yet whose languages display an unmistakeable Burman stamp. Of these, three typical instances are the Szi, the Lashi and the Maru on the eastern borders of the Myitkyina and Bhamo districts. Judged by externals, there would seem to be no question that these were Kachin tribes. They inhabit the Kachin country, they have affinities with the

Chingpaw proper in custom, tradition, and dress. No one would hesitate to set them down as Kachins were it not that, though through their remoteness they are less exposed to Burmese influences than the Chingpaw-speaking races, their speech is, so to speak, penetrated with Burmese. How this Burmese element entered into their tongue is a problem of extraordinary interest. It is touched upon by Captain Abbey in his useful little Manual of the Maru language. It has been there suggested that these tribes may be "the remnants left by the Burmese in their migration from the north into Burma, or possibly tribes of the same origin as the Burmese who left Tibet soon after them." I should be disposed to accept some theory such as the above. It seems hardly possible that these Burmese characteristics can have been the mere result of an outward contact with the dwellers of the plains; they are too deep-seated for that. Moreover, this particular feature is not confined to the three comparatively adjacent tribes in question. The Szi, the Lashi and the Maru are, as it were, but three links in a chain of races stretching eastward and southward from the Kachin hills to beyond the Salween and the Mèkong (such as the Lisaws, the Lahus and the Lolos), whose speech exhibits to a greater or a less degree these same indications of an affinity with Burmese. Of these more distant tribes more hereafter. As regards the Szi, the Lashi and the Maru they have been classed ethnically as Kachins, but Dr. Grierson holds that their languages have enough Burmese in their composition to justify their addition to the Burmese group of languages. Szi, Lashi and Maru were the languages returned by 756, 84 and 151 persons respectively at the 1901 Census.

Hpon.

114. The facts are much the same in connection with Hpon. This dialect, spoken by a small river-faring community in the neighbourhood of Sinbo in the Myitkyina district, has been looked upon by Sir George Scott as a hybrid. It is a question whether ethnically the Hpons are more closely allied to the Burmans or to the Shans, and it is the same with their speech. Their numerals are said to be a mere jumble of Shan-Burmese, and it would be hard to say now which of the two languages furnished the original basis and which the superstructure. The latter is just as likely to have supplied the foundation as the former. There seems to be nothing to urge against the classification of Hpon as a dialect of the Burmese group. It was not specifically returned by any of its speakers at the recent Census.

Maingtha.

115. The precise position to be assigned to Maingtha or Nga Chang, the vernacular of the Maingthas or Tarengs, the peripatetic cutlers, traders and coolies who during the cold weather scatter over the north of the province, is doubtful. The tongue is clearly a conglomerate. It strikes one at first almost as a pedlar's jargon, the outcome of generations of wanderings. This is possibly an extreme criticism, but I think it conceivable that the dialect may have been coloured by the constant journeyings of its speakers. There seem to be indications, however, that some of the Burmese in its composition can only be accounted for in somewhat the same way as in the case of the Szis, Lashis and Marus, and Dr. Grierson is doubtless justified in including it among the Burmese languages. Captain Davies tells us that about 30 per cent. of its words appear to be connected with Burmese and 12 per cent. with Shan. A portion of the residuum would seem to be Kachin; indeed we learn that the Kachins look upon the Maingthas or Tarengs as remotely connected with them. The Tarengs' dress and general appearance, however, point more to a Chinese or Chinese-Shan affinity, and Chinese seems to have left its mark on their dialect. The question of classification is obscured rather than illuminated by information from outside the province. In a note on the Khamtis by Captain Gurdon (*Journal of the Royal Asiatic Society*, 1895, page 157) reference is made to the Turungs or Tairongs of Assam. Tairong, the writer tells us, is nothing more or less than Tailong. If, as appears obvious, these are the Tarengs and the derivation of the word is correct, a Shan connection is at once established. Unfortunately, however, the linguistic test that might have settled the question once and for all is lost, for, as Captain Gurdon says:—

"Strange to say these Tairongs themselves spoke Singpho, the explanation of this being as follows: The Tairongs, who originally lived somewhere in the direction of the Upper

Irrawaddy started for Assam to join some Naras who had preceded them thither. Unfortunately for them they had to pass through the Singpho country. As they passed through the country they were taken captives by the Singphos. They remained as captives for five years according to their own account, but probably for longer, as they quite forgot their own language and adopted the language of their captors. It is strange that even to this day Tairongs talk nothing but Singpho."

There were 465 Maingtha-speaking folk in Burma on the 1st March 1901.

The Lisaw sub-group.

116. To return now to the remoter tribes referred to in the paragraph dealing with the Szi, Lashi and Maru dialects. Dr. Grierson, in dealing with the languages of the province, has found it necessary to create a special sub-group of certain languages spoken for the most part on the eastern borders of the Shan States. He has named it the Lisaw sub-group and, as he states its members appear to be connected with Burmese, it may be assumed that he intends it to be a sub-group of the Burmese language group. Lisaw is spoken in the east of the Myitkyina district, in Möng Mit, and throughout the Northern and Southern Shan States by a tribe known to the Chinese as Lisaw, whom the Shans call Yawyin. The sub-group consists of the following forms:—

Lisaw or Yawyin.	Akö.
La'hu, Mu-hsö, Kwi or Myen.	Lisu or Lissu.
Akha or Kaw.	Mosso.

The La'hu variety is spoken in Kēngtūng and in the east of the Northern Shan States by 16,732 people. It is practically the same as Lisaw which claims 1,605 speakers. Akha and Akö are the vernaculars of closely allied tribes in the hills to the east of Kēngtūng. The recent operations dealt with 21,175 persons who spoke the former and 1,162 who spoke the latter tongue. Lissu is clearly related to Lisaw. The Lissus have been studied by Prince Henri d'Orleans and other French observers. It seems possible that they are identical with the Lisaws. It is also possible that the Mossos, who are spoken of by the French in connection with the Lissus, are the Mu-hsö of Kēngtūng. There is nothing in the vocabularies published to militate against such a theory. Neither Lissu nor Mosso is spoken in Burma, but the tongues are referred to on account of their similarity with Lisaw and Mu-hsö. The Burmese substratum in all these languages (even in the Akha and Akö, where it is least marked) is remarkable and, to my mind, can only be accounted for by some such explanation as has been hazarded in connection with the Szi, Lashi and Maru vernaculars. There can be no question, I think, that it is the same Burmese strain that is visible through all these forms. Sir George Scott in his *Upper Burma Gazetteer* points out that Sir Henry Yule agreed with Dr. Anderson in thinking that "the similarity of the Lissu and Burmese languages was such that it was hardly possible to avoid the conclusion that the two peoples had sprung from one and the same stock." It is easier, however, in this case, to detect the strain than to account for it. Lo-lo, another of the trans-frontier languages spoken by a number of tribes who have affinities with the La'hu, has indications of a relationship with Burmese. It would, no doubt, be possible to add still further to the list.

The Chingpaw language group.

117. Of the Kachin languages or dialects our knowledge is at present limited. The form which is most commonly spoken through what is known as the Kachin country is the Chingpaw, hand-books of which have been written by Messrs. Symington and H. F. Hertz. In the preface to his vocabulary Mr. Symington talks of three varieties of Kachin—the Chingpaw, the Kauri, spoken by a tribe east of Bhamo, and the Hukong valley speech. This last is presumably the dialect dealt with in the *Outline Grammar of the Singpho language* published by Mr. Needham in 1889. A comparison of this form with the Chingpaw form proper exhibits a number of minor modifications in a tongue the basis of which is clearly identical. The Hukong valley variety is probably the form on which is based the dialect of the Sassans, referred to in the Kachin Hills chapter of the *Upper Burma Gazetteer*. Sir George Scott speaks of the Kaori Lepais, who occupy the hills to the east and south-east of Bhamo, and who it may be assumed are the speakers of Mr. Symington's Kauri dialect, though no mention is made in the Gazetteer of any special Kaori patois.

Sir George Scott has classified with the Kachins, the Szis, the Lashis and the Marus. These tribes, however, though outwardly they resemble the Kachins proper, speak tongues which Dr. Grierson refuses to admit into the same category as the Chingpaw language. It is in some quarters believed that the Szis, the Lashis and the Marus are not Kachins at all, or at best are hybrids. Whether this is so or not is not a question that affects the present issue; the fact remains that their forms of speech are, as I have already pointed out, more closely allied to Burmese than to Kachin, and have been treated for the purposes of the Linguistic Survey as belonging to the Burma group of languages. How their languages acquired these Burmese characteristics is a problem for the research of the future to solve. No attempt has yet been made to classify the tongues of the Khangs, the Kaphawks, the Kaluns, the Khenungs and the Khunnongs, scattered tribes whom the Kachins are said to look upon as distant connections. Our information regarding these remote communities, who inhabit the extreme north of the province, for the most part beyond our administrative border, is slender, but it seems possible that when their dialects come to be subjected to the test of critical analysis, one or two of them at any rate will be assigned to the Kachin group. Some of these tribes are, however, undoubtedly Mishmis.

Kachin is an isolating language with a structure closely resembling Burmese; so much so that, as Professor Forchhammer has asserted, "a Kachin sentence can generally be transposed into a Burmese sentence, word for word, without disturbing the collocation of words," but I have it on good authority that it can hardly be said to be tonic at all. Mr. Symington in his Kachin Vocabulary makes no mention of tones, and Mr. Needham, in his grammar of the language as spoken in Assam, is careful to point out that there are only a few monosyllabic words which are distinguishable from one another by variations of the vowel sound.

Over twenty years ago Captain Forbes showed by a comparison of vocabularies that the Kachin language possessed affinities with the languages of the Naga group. The similarity did not escape the eye of an even earlier observer. Mr. Logan, in an article of the Journal of the Indian Archipelago, issued close upon fifty years ago, when the knowledge of the tongues of the interior was in its veriest infancy, commented on the fact that "Singpho" had some peculiar Naga and Tibetan characters. The most recent philological enquiries show that the connection pointed out by these scholars is real. The ethnic relations subsisting between the groups is sketched in the chapter on caste, tribe and race. Dr. Grierson has quite recently drawn attention to the fact that Meithei, the language of Manipur, forms a connecting link between Kachin and the southern forms of speech. Kachin was the language returned by 65,570 people at the census.

The Chin language group.

118. Dr. Grierson has recently prepared a most instructive note on the Kuki-Chin languages, from which I give the following extracts:—

"The territory within which these languages are spoken extends from the Naga Hills in the north to Sandoway in the south. Their western frontier is, broadly speaking, the hills extending from Sylhet in the north through Hill Tipperah, the Chittagong Hill Tracts, the Arakan Hill Tracts and the Arakan Yomas. Towards the east they do not extend much further than the Kubo and Myittha valleys. Most of the tribes seem to have passed the Lushai or Chin Hills on their way to their present homes, where they have settled in relatively recent times * * *. In the north the Kuki-Chin languages show an affinity to the Naga group, while in the south they gradually become more like Burmese. The whole group is more closely connected with Burmese than with Tibetan."

It is not unnatural that towards the south there should be a leaven of Burmese in the tongues of the Chins. What is more significant is that, even where they are far removed from Burmese influences, these languages still present a considerable identity in structure with Burmese. The identity is apparently not so striking as in the case of Kachin, but it is sufficiently close to prove an affinity, and, though not so obvious a phenomenon as a similarity in vocabularies, is to the student really as suggestive. Practically all the following remarks made by Dr. Grierson in connection with the Kuki-Chin tongues might equally have been made in regard to Burmese:—

"There is no grammatical gender, and only the natural gender of animate beings is distinguished.

"The adjectives are all verbs. They often take the form of relative particles and their place is generally after, but often also before, the noun they qualify. Noun and adjective form a kind of compound and case suffixes and postpositions are added to the last member of this group of words * * * . The root (of verbs) is combined with postpositions, in the same way as a noun, in order to denote different relations. There is often no difference between the present and the past time, and the various suffixes which denote the past are certainly all originally independent words. In some cases the signification of these suffixes can still be traced as meaning completeness or some such idea (compare the Burmese ၿီး)."

In common with Burmese the Kuki-Chin languages possess what Dr. Grierson calls "generic particles added to the numerals in order to indicate the kind of things which are counted." They are, however, as Mr. Houghton has already told us in connection with Southern Chin, prefixed to the numeral instead of, as in Burmese, affixed.

Kuki-Chin sub-groups.

119. The Kuki-Chin group has been divided by Dr. Grierson into two principal sub-groups, the Meithei and the Chin. Meithei is the language of Manipur and need not be considered here. The Chin sub-group is subdivided into the following :—

Northern Chin.	Old Kuki.
Central Chin.	Southern Chin.

It may be as well to preface the following remarks regarding the different Chin languages by an extract from the *Upper Burma Gazetteer* :—

"As to the race identity of the Chin tribes" (says the compiler), "there can be no doubt, but there is as great a variation in appearance as there is among the different Kachin tribes and the divergencies of speech seem to be even greater. It is only a long day's march from Falam to the heart of the Siyin country, but the two dialects are mutually unintelligible. The dialects to the south differ to the same extent or perhaps even more."

How far this diversity of tongues is due to the head-hunting practices alluded to by Mr. Baines in his paper on "the language Census of India," it is unnecessary to consider here. Suffice it to point out that a fuller acquaintance with the Chins is likely to bring to light a considerably larger number of forms of speech than have hitherto been identified and recorded. A quaint local legend accounting for these variations in speech is given in Chapter VIII.

Northern Chin languages.

120. The first of the Northern Chin languages given by Dr. Grierson is Thado which is said to be spoken in six villages in the Kanhow territory in the Northern Chin Hills; the next is Sokte, the vernacular of a tribe of that name, which is found on both banks of the Manipur river in the north of the administered tract. The Siyin, the third of the Northern Chin forms with which we are concerned, is spoken south of the Sôkte country. Captain F. M. Rundall is the author of a handy Manual of Siyin. There are two other Northern Chin tongues, namely, Rāltē and Paitē, but they do not appear to be spoken within the limits of Burma. They form a link connecting the Northern and Central Chin dialects.

Central Chin languages.

121. The best known of the Central Chin forms is the Baungshe, Lai or Haka. Baungshe is merely a Burmese nickname suggested by the custom adopted by certain tribes of tying their top-knot well forward over the forehead and means simply the man who wears his turban cocked. Major Newland, I.M.S., whose knowledge of the Hakas or Lais is unique, has within the last few years published a handbook of nearly 700 pages dealing with their speech, which is in itself a small encyclopædia. It is quite the fullest and most elaborate work that has yet been published regarding any of the languages of the hill tribes of the province. The Lai shows a good deal more of Burmese influence than the Siyin form. The Shonshe of Gangaw is a dialect of the ordinary Lai language. Tashon is a Central Chin form. It is not represented by any vocabulary in the *Upper Burma Gazetteer*. Comparatively few European officers have up to date rendered themselves proficient in it. Yahow or Zaho is a dialect of Tashon. The remaining Central Chin forms are spoken outside the limits of the Chin Hills. The above Northern and Central Chin forms were not separately returned at the 1901 Census. They have been lumped together under the general head of Chin and their speakers form part of the total of 175,037 persons returned as using Chin.

Old Kuki languages.

122. Of the old Kuki languages the only one that concerns us in Burma is Kyaw, the vernacular of 215 persons in the Arakan Hill Tracts on the 1st March 1901. Very little is known about Kyaw, but there seems to be no question as to its being an old Kuki form. The original old Kuki tribes are said to have lived originally in the Lushai Hills, and to have been expelled from them by the Thados.

Southern Chin languages.

123. Further south the Southern Chin tongues begin. Nothing about the first five of these (the Chinmè, the Welaung, the Chinbôk the Yindu and the Chinbon) will be found in the Imperial Tables, for they are the vernaculars of the tribes of the Pakôkku Chin Hill Tracts, the population of which was estimated only and did not figure on the standard schedules. There are three distinct forms of Chinbôk, the Northern, spoken from the Maw river to the north bank of the Che river ; the Central, between the south bank of the Che and Kyauksit rivers and the Southern, spoken by the Kadin and Saw river Chins. It is not clear which of these is the form given in the *Upper Burma Gazetteer*. The Yawdwin dialect given in the *Upper Burma Gazetteer* seems closely related to the Chinbôk. I know of no published vocabulary of the Welaung variety, or of the Yindu, which is said to be an entirely distinct language. The Chinmè is the patois of a local clan and appears to be one of a number of variations from the ordinary speech of the surrounding country. There are many other neighbouring forms that are probably as much entitled to be termed dialects as it. It is described as the connecting link between the Lai tongue and the Southern dialects. The Chinbôns claim to be of Burmese origin. There is no Chinbôn vocabulary in the *Upper Burma Gazetteer*, and I am therefore not in a position to say whether their speech gives any indication that would justify their title to the claim. In the same neighbourhood, but for the most part in the Pakôkku district, are the Taungthas, who profess to trace their ancestry back to emigrants from the Myingyan district. Their dialect, which was spoken by 4,578 persons in the regularly censused areas, bears traces of Burmese, but I should be inclined to think that the basis was Chin and the Burmese matter overlaid. If any classification were to be made of these tribes, I should be disposed to separate the Chinmè, the Welaung and the Chinbôk, who seem to be more closely allied to the Hakas, from the Yindus, the Chinbôns and the Taungthas. Dr. Grierson thinks that the Yindus figure among the tribes that on the Arakan frontier are known as Shendus. They and the Chinbôns appear to have certain affinities with the peoples of the Arakan Hill Tracts. The Taungthas appear to be known on the Arakan side too. In 1882 Professor Forchhammer wrote of them as follows :—

"The Taungthas are hill tribes of Arakan including several distinct tribes, such as the Shandus, Kyaw (Chaw, &c.). The language of the Taungthas contains a number of words which are almost identical with the Burmese ; however, the main body of the idiom belongs to another language group, apparently to the Kuki."

Our information as to the relation that these tribes bear to one another is defective, and, till further data are procurable, a satisfactory classification of these languages and dialects will be impossible.

Southern Chin forms in Lower Burma.

124. The main tongue of the Arakan Hill Tracts proper is the Kami, which was spoken on the 1st March 1901 by 24,389 people. A vocabulary of it is given in Major Hughes' *Hill Tracts of Arakan*. It varies considerably from the dialects specified above, but is obviously Chin in form. Mr. Houghton has in the Journal of the Asiatic Society written an article on Kami, to which are appended vocabularies, with remarks showing analogies in Naga, Miri, Karen, Lushai and Manipuri. He believes he has detected in the numerals 20 to 50 certain traces of a Môn-Annam influence. The remaining Southern Chin forms of Northern Arakan are the Sak, the Anu and the Shendu. The two latter were returned by 775 and 43 persons respectively. Shendu I have placed provisionally with Yindu. Up till now the Mro language of the Hill Tracts has been looked upon as Chin. Dr. Grierson, however, now tells us that it has turned out, on examination, to undoubtedly belong to the Burma group. Kun and Pallaing which have been looked upon as forms of Southern Chin have not at this Census been returned as the languages ordinarily spoken by any of the population of the province. Sak or Thet, which was spoken by 37 males and 30 females in the Akyab district, is

said to bear a strong resemblance to the as yet unclassified Kadu of the Upper Chindwin and Katha districts, which is held to have a Kachin origin. If this relationship had been fully established, the Sak language would, as suggested by Mr. Houghton, have to be withdrawn from the Chin, and, together with Kadu, placed in the Kachin group of languages. Sir George Scott, however, hesitates to give unreserved adhesion to this theory, throws out a suggestion that the first Kadus were captives from the Arakan side, and thinks it best for the present to treat Kadu as a hybrid speech. So far as I can ascertain, Professor Forchhammer, who dealt in a note of 1882 with the Sak language, comparing it with the Kami, the Mro and the Chin, seems never to have held any other view than that Sak was Chin in structure and, as Mr. Houghton admits himself that the Sak vocabulary on which his theory was based is incomplete, the matter may be said still to rest in doubt. Kadu has been placed provisionally in the Burma group of languages and will probably remain in that category, for whatever it originally was, it is now Burmanized almost out of recognition. Pending further enquiry, I have left Thet in the Kuki Chin group. Daingnet, which has hitherto been looked upon as a Chin form, is spoken in that portion of the Akyab district which adjoins Chittagong. Some specimens of the language which have been sent me by Mr. Saunders, Deputy Commissioner of Akyab, show that it must be excluded from the Indo-Chinese family altogether. It seems to be nothing more nor less than a corrupt form of Bengali. It claimed 3,105 speakers on the 1st March 1901.

Through the whole length of the Arakan Yomas, from Northern Arakan down to the confines of Bassein, as well as here and there to the East of the Irrawaddy, are found hill tribes who are known as Chins. These I have in the Chapter on caste, tribe and race designated the Southern Chins, in contradistinction to the Northern Chins, administered from Falam, and the Central Chins of the Pakôkku and Northern Arakan Hills. Dr. Grierson calls their speech Khyang or Shö, neither of which terms appears to me altogether suitable. The expression "Southern Chin," though geographically unexceptionable, has, for the purposes of a linguistic classification, the disadvantage of giving to a single form the title already accorded to the collection of languages of which it is a member. The tongue appears to be known locally to the missionaries who labour in this field as Saingbaung. Perhaps, however, the best name to give to the speech of these southern communities is Yoma Chin, and for want of a better I will make use of it here. Mr. Houghton is our main authority concerning this Yoma Chin form. His monograph, which Mr. Eales has embodied in his 1891 report, appeared about the same time as his *Essay on the language of the Southern Chins and its affinities,* which comprises a grammar, a collection of sentences and vocabularies of the dialect. Since then he has contributed to the Journal of the Royal Asiatic Society, an article illustrating the differences between the Minbu and the Sandoway forms, that is to say, between the speech of the eastern and western slopes respectively of the Yomas. These differences are, when all things are considered, not very marked, and show that the dialect is, from its most northern to its most southern limit, fairly homogeneous. The variety spoken in Bassein and Henzada is said to have suffered phonetically from the intercourse its speakers have had with the dwellers in the plains, and is not as pure as the Minbu and Sandoway forms.

THE SIAMESE-CHINESE SUB-FAMILY.

125. Whatever may be said of the other languages of the Province, those of the Siamese-Chinese sub-family are indubitably polytonic. Of them all, that which displays the very striking characteristics of the tonal system to the most marked degree is Chinese, with which, as an exotic, we have here very little concern. Chinese was the language ordinarily spoken by 47,444 persons in Burma at the time of the Census. The corresponding figure in 1891 was 31,079. Chinese has not been included in the Provincial language scheme, but the following note on the dialects spoken in Burma kindly furnished me by Mr. Taw Sein Ko may be of interest:—

"The Chinese immigrants in Burma speak different dialects. Those who come from Yünnan speak Yünnanese, which is a dialectic variety of Western Mandarin whose headquarters are at Chengtu, the capital of Ssŭch'wan. The Southern Mandarin is spoken in its purest form at Nanking, while Pekingese constitutes the Northern Mandarin. * * * Chinamen from Yünnan and Ssŭch'wan, whose dialects are intelligible to each other, are

found congregated at Bhamo and Mandalay and in other parts of Upper Burma and the Shan States. The Chinese in Lower Burma come mostly from Amoy, Swatow, Canton or Hainan. Some of them may have passed through the Straits Settlements or the Malay Archipelago. The Amoy Chinese are merchants and petty traders. Their colloquial is distinct from their book language. In conversation their name for man is *lang*, which is pronounced *tin* in reading their books. The dialects spoken by the Chinese of Swatow has a distinct resemblance to the Amoy dialect, while Cantonese differs from both. Chinese carpenters, contractors and artisans belong to Canton. The Chinese servants employed in clubs, hotels and private houses are natives of Hainan, and speak a different dialect called Hainanese. * * * The Chinese speaking different dialects are not intelligible to each other, and at Bhamo or Mandalay the natives of Yünnan, Amoy and Canton have to make use of the Burmese language as the medium of communication in their conversation. The literary symbols are, however, the same throughout the Chinese Empire. It is the difference in the pronunciation of the same ideographs that has given rise to the Babel of tongues."

The two groups of the Siamese-Chinese sub-family in which we are mainly interested are the Tai and the Karen.

The Tai language group.

126. The Tai group has, Dr. Grierson tells us, two sub-groups, the Northern and the Southern. The Southern includes Siamese, Lao, Lü and Hkün, the Northern the three forms of Shan, namely, Northern Burmese-Shan, Southern Burmese-Shan and Chinese-Shan with Khamti and Ahom. For us in Burma the Southern Tai sub-group possesses comparatively little interest. Siamese was spoken by 19,531 persons, for the most part in the Tavoy, Amherst and Mergui districts. Lao is the speech of but few of the inhabitants of this side of the Siamese border. Hkün and Lü are practically confined to the State of Kēngtūng. A certain adventitious interest was attached during the Census abstraction operations to the Hkün form in consequence of the fact that it was used in writing up the bulk of the schedules for the Kēngtūng State, which had to be deciphered in Rangoon by a special staff of clerks sent from the Southern Shan States, the ordinary Shan clerks being unable to read it. According to Mr. Stirling the Hkün character is the same as the Lü, and both are nearly identical with the Western Lao of Chiengmai, such differences as exist consisting chiefly in the omission by the Hkün and the Lü of letters and marks used by the Lao. Similarly, in the spoken language syllables are often clipped by the Hkün and the Lü which are sounded by the Lao. The Hkün form, it may be observed, appears to have been influenced by the speech of the Was, whose seats were at one time far more extensive than they now are. In Lü and Hkün the open and the closed tones are indicated by special marks. Hkün had 42,160 speakers at the Census and Lü 19,380.

Southern Tai sub-group.

Northern Tai sub-group.

127. With the Northern Tai sub-group we have more concern. It comprises the tongues of the first three of the four ethnical sections into which Sir George Scott, adopting a suggestion of the late Mr. Pilcher's, has proposed to divide the Tai. Dr. Grierson's Northern Burmese-Shan is spoken by Mr. Pilcher's North-western Shans and by the Shans of the Northern Shan States; his Southern Burmese-Shan is the vernacular of the Eastern Shans of the *Upper Burma Gazetteer*. The Chinese Shan of the Linguistic Survey is the speech of the second of Mr. Pilcher's sections, to wit, the North-eastern. At the present day the Northern Tai sub-group is represented in its purest form by Ahom, the language of the ancient Shan conquerors of Assam, now known only to a handful of conservative priests, but possessed of a historical literature which is being investigated by the Assamese Government. Ahom exhibits much older forms than do the modern Tai tongues. At the same time, though its connection with the Northern Tai sub-group is indisputable, it shares several marked phonetic features in common with Siamese. Though we are here directly concerned neither with Ahom nor Siamese, this point is one of interest. Sir George Scott indicates much the same fact when he says that Siamese of education, though unable to converse with their near neighbours, the Lao, have no extraordinary difficulty in understanding their most distant connections, the Khamti Shans.

Northern Burmese Shan.

128. Northern Burmese Shan is practically that form of the language which is spoken in the Bhamo, Katha, Myitkyina, Ruby Mines and Upper Chindwin districts of Upper Burma and in

the Northern Shan States. The Khamti of Assam closely resembles the Northern Burmese-Shan spoken in the valley of the Uyu and on the upper reaches of the Chindwin. Khamti and Shan are really one language. Their alphabets differ to a certain extent, but, beyond this, except for a few dialectic divergencies, they are practically identical in structure.

Southern Burmese-Shan.

129. Southern Burmese-Shan has for its domicile the British Shan States west of the Salween, from Laihka and Möng Nai southwards. It is in fact the vernacular of the people who, as Sir George Scott says, are "most directly known to us as the Shan race." It is, like the forms referred to above, isolating and unmistakeably polytonic. It possesses five tones, a mastery of which is a *sine qua non* if the language is to be properly learnt. On this side of the Salween Shan varies but slightly from locality to locality. Thanks to Dr. Cushing's works, the tongue can now be exhaustively studied by any student who wishes to master it. In contradistinction to the dialects spoken east of the Salween, Southern Burmese-Shan is sometimes known as Western Shan. The expression is not unexceptionable, for, properly speaking, Western Shan should be the form which is spoken west of the Irrawaddy. It must be clearly understood that the divergencies between the different forms of Shan spoken in the Province are on the whole very slight, and that even Khamti cannot be looked upon as a separate language, in fact, in one of his notes on the Tai group Dr. Grierson speaks of it as consisting of two languages only, Siamese and Shan. Dr. Cushing says of Northern Tai—

"The divisions of the Northern group are separated by what are really dialectic differences. They are often not so marked as to prevent persons belonging to one division from holding much intercourse with persons belonging to another division. Though their alphabets differ, their variations are so small that a person really familiar with the books of one division can slowly read those of another division."

Elswhere he writes :—

"The scientific classification of the Tai family of languages depends on the study of their internal structure. In such study I have found no use for such terms as 'Northern Shan' and 'Southern Shan' languages."

On the whole it seems to me best to sink the difference between the Northern and Southern Burmese Shans forms and to speak of all the Tai forms of speech occurring in Burma and the Shan Sates West of the Salween (except Chinese-Shan and Khamtias) Burmese Shan. The aggregate of the Shan-speaking people at the Census was 751,759. This total includes a small number who spoke Chinese-Shan.

Chinese-Shan.

130. Data regarding Chinese-Shan are comparatively meagre. No illustrations of the dialect have been given us in the *Upper Burma Gazetteer*, though from that work we learn that the written character of the Shan Tayôks possess few of the embarrassing features of Chinese. It is not ideographic, but is probably a distorted version of the Burmese-Shan script. The vernacular is the tongue understanded of the people, not, so to speak, the language of the aristocracy. The Shan-Chinese Chiefs, it would appear, speak Chinese, not Shan. Chinese-Shan is spoken in that portion of the country round about Bhamo and the Northern Shan States that abuts on the westernmost edge of Yünnan. Sir George Scott appears to consider that the speech of the Northern Shan States is more closely allied to Chinese Shan than to the Shan of the Southern Shan States, and would classify the Northern Shan States dialect with that of the Shan Tayôks. I gather, however, that neither Dr. Grierson nor Dr. Cushing holds with this view, which is, I think, a new one.

Connection of Shan with Chinese.

131. Shan itself is of course closely allied to Chinese. In this regard Sir George Scott has the following to say : —

"The relationship of the Tai to the Chinese races seems unmistakeable and appears no less clearly from their personal appearance and characteristics than from their language. * * * Mere similarities of words do not prove race descent, but they help towards it. It is not enough to say that *ma* both in Chinese and Shan means "horse," that *p'ing* and *ping* mean level * * *, but when we find that, in addition to this, the grammatical structure of sentences in Chinese and in the Tai languages is the same and quite different from

that of Burmese and the Tibeto-Burman languages generally, there is strong presumptive proof of relationship. The place of the object of the verb and of the possessive in Shan are identical with the Chinese instead of being inverted in Burmese. Moreover, the use of complete words of related meanings used together is characteristic both of the Chinese and the Tai languages. * * * When all these points of similarity are taken into account, the conclusion that Chinese and Tai are sister languages is irresistible."

The Karen languages.

132. The Karen tongue, in its various forms, is spoken more or less along the whole eastern frontier of Lower Burma from Mergui to Toungoo, in portions of the delta of the Irrawaddy, in the south-west corner of the Shan States and in the feudatory States of Karenni. The total of the Karen-speaking population on the 1st March 1901 was 711,408. The Karens are divided into three main tribes, the Sgau, the Pwo and the Bghai, and the three principal dialects of the language follow this division. Roughly speaking the Sgau and Pwo dialects are confined to Lower Burma, while the Bghai is the speech of the northernmost tribes whose habitat is Karenni and the Southern Shan States. For convenience of classification I have called the Pwo and the Sgau the Southern Karen and the Bghai the Northern. The nomenclature has not been formally recognized, but it indicates a geographical fact. Sgau and Pwo are both spoken in the narrow strip that runs up from the 12th to the 19th degree of latitude: the communities that have spread out over the delta west as far as Bassein are for the most part Pwos. The fundamental distinction between the three lies in the fact that, while the Pwo form has retained its final consonants, the Sgau and he Bghai have discarded theirs. Sgau is probably the Karen language of the future. Pwo is said to lack vitality and to be in danger of disintegration. Karen has been reduced to writing by the missionaries, who have adopted a modification of the Burmese alphabet to express it. Their graphic system includes the indication of tones, in which the language is rich, by means of tonal signs. Dr. Cushing describes Sgau as having "one of the most perfect systems of phonetic representation in the world." Dr. Grierson classes Karen in the Siamese-Chinese sub-family, and has found a place for various sub-dialects of Sgau and Pwo, such as Mopgha, Wewa, and others in his "Indexes of Languages." Mr. Eales is generally of opinion that Karen has suffered in the past from overclassification and is disposed to neglect all of these varieties save Taungthu, which is spoken on the western borderland of the Karen country, from Thatôn in the Tenasserim division to the Myelat. Judging, however, from the example given in the *British Burma Gazetteer*, Mopgha appears to possess an identity of its own, and I should be inclined to treat it as a distinct sub-dialect of Pwo. Taungthu has been regarded as a sub-dialect of Pwo, and what Karen there is in it is Pwo, but such is the admixture of other linguistic elements in its composition that Sir George Scott prefers to look upon it as a half-bred language. I have, however, placed it provisionally in the Karen group. It was spoken by 160,436 persons in 1901. I may here observe that of the 41,115 persons shown in 1891 as returning Taungthu as their mother-tongue, the 5,269 who came from the Pakôkku district ought to have been shown as speaking Taungtha, not Taungthu.

Southern Karen sub-group.

Northern Karen sub-group.

133. The principal representative of the Bghai dialect is the speech of the Red Karens of Karenni and their immediate neighbours in Karenni and the Southern Shan States. We are indebted to Mr. Houghton for an instructive monograph on this variety. According to him the Karenni tongue conserves the Karen language in its original and purest form to a greater extent than the "more decrepit" Sgau and Pwo. It is believed to have the same five tones that Sgau possesses. It has numeral auxiliaries, though its numbers from fifty onwards are, Mr. Houghton thinks, a comparatively recent introduction. It presumably bears much the same relation to the Pwo and the Sgau that Arakanese bears to Burmese. Major R. J. R. Brown has recently brought out an elementary hand-book of Red Karen. The total of persons using the Red Karen dialect outside the estimated areas of Karenni was 1,363. Varieties of the Northern Karen sub-group are spoken in the Brè country, in the Padaung area, and in the States of Loi-lông and Möngpai. Of these varieties a number of specimens figure in the *Upper Burma Gazetteer*. One of them, Manö, is a dialect of the Brès or Lakü. There are besides four representatives of the speech of the head-

shaving Sawngtüng or Zayeins, namely, the Sawngtüng, the Padeng, the Banyang and the Kawn Sawng. The preservation of some of the main features of the form used by the Banyangs is of special interest, as there is no doubt that the speech of this, the most select tribe out of a race of distressingly rigid endogamists, will very shortly have passed for ever out of the reach of vocabulary makers. The Zayeins of the *Upper Burma Gazetteer* are apparently the Ta-roo mentioned in the 1880 edition of the *British Burma Gazetteer*. Dr. Mason classifies the Ta-roo tongue as a Pwo dialect. The Gaikho of the *British Burma Gazetteer* appear to correspond with the Padaung. Their speech Dr. Mason is also inclined to treat as a variety of Pwo. I understand, however, that Sir George Scott includes the Zayeins and the Padaungs linguistically as well as ethnologically among the Bghai; and in his *Karens of the Golden Chersonese* Colonel McMahon says that the Gaykho language may reasonably be placed in the *Bwe* family. The Yintalè and the Sinhmaw Mepauk are two more forms that have been illustrated in the *Upper Burma Gazetteer*. The Yintalè variety is spoken in the State of Bawlakè. Further distinct varieties, of which we at present have no published vocabularies, are the Yinbaw, a patois of the Padaungs, and the language of the White Karens of the Paunglaung valley of the Loilông State. This latter, like the language of the Brès, is closely allied to the Taungthu. Brè was returned at the 1901 Census as the language of 669 speakers outside Karenni and Padaung and Zayein were the vernaculars of 9,321 and 4,666 persons respectively in the non-estimated areas. Taungthu has been referred to above. It is a Burmese-Karen hybrid. Taungyo, also spoken in the Myelat, is supposed to closely resemble Taungthu, though I can trace very little more than an archaic form of Burmese in its composition, and have placed it in the Burmese group. A third *quasi*-Karen language, which has the reputation of exhibiting still more marked Burmese characteristics, is the Danu or Danaw, spoken also in the borderland between Burma and the Shan States, but generally further north than the Taungthu. Taungthu, Taungyo and Danu are all three spoken of together in the *Upper Burma Gazetteer*, where it is said that the Taungthu language is mainly Karen, the Danu mainly Burmese, and the Taungyo betwixt and between, with a predominance of Burmese words. For my own part I am inclined, for reasons which will be detailed hereafter, to deny the existence of a separate Danu tongue, and to classify the Danaw language in the Môn-Annam family.

The Môn-Annam Sub-Family.

The Môn-Annam sub-family.

134. There are few of the Indo-Chinese language forms on which so much apparently profitless labour has been spent in the past as the Môn-Annam, and in the eyes of the province not the least important of the services rendered by the Linguistic Survey will be its presentation to the public of a clear conception of the forms of Môn-Annam speech. In the Peguans or Talaings the people of Burma have from time immemorial had living in their midst well-known representatives of the ancient Môn-Annam people who, in the dim past, must have spread over the greater part of Assam, Burma, Siam and Indo-China. The characteristics of their tongue have long been well-known, but for many years past attempts to trace its connection with other Asiatic languages have failed to carry general conviction. To the ethnologist it has seemed absurd that the vast race, of which the Talaings of the Kingdom of Pegu were a minor branch, should have left so light a linguistic impress on the peoples of the West of Indo-China, and the establishment of a relationship between Talaing and other languages in Asia has naturally been a problem full of fascination for local scholars. In the fifties Logan pointed out that the Môn had "a strong linguistic connection, not only with the Kambogian, but with the language of some of the ruder mountaineers of the Mèkong." What the bond of union was he left to a later generation to determine. Mr. Houghton, in his excursions into the realm of comparative philology, has detected sporadic Môn traces dotted here and there over the province, in the Karen Hills to the east, in the language of the Kami of the Arakan Hill Tracts to the west, and has even noted obscure Môn influences on the Tibetan tongue. For all this, the lack of tangible results so far has been remarkable. Of the few definite theories formulated, all have seemed doomed to refutation. The view, so strongly held in the past by Mason and others, that a relationship

existed between the language of the Peguans and that of the Kols of Central India, was by later students weighed and found wanting (though I would here observe that Captain Forbes, while scouting the idea of a "genealogical relationship" between the Kolarian and Môn-Annam languages, was forced to admit that certain affinities might be traced between them). It was Dr. Forchhammer who was mainly instrumental in demolishing the Môn-Kol or Môn-Munda theory. This scholar, in his turn, classified Talaing linguistically with Palaung. Sir George Scott has held that linguistic evidence is entirely against this latter connection; and has hinted that, if an affinity is to be looked for, it may possibly be found in the Hmeng or Miaotzu of South-western China. In a word the fixing of the precise relation that Talaing bears to other languages has so far largely baffled the earnest enquirer. Dr. Grierson has now gathered up the threads and given us a connected and comprehensive conception of the Môn-Annam sub-family, so far as he is acquainted with it, which shows that much of the surmise of the past is, after all, well founded. The words "Mon" and "Munda" may have no common origin. The relationship of Talaing with Palaung may at the first blush seem problematic, but Talaing and Palaung are, if the evidence of the Linguistic Survey is to be believed, remote members of the same sub-family, and Munda has certain elements in common with them. Dr. Grierson tells us that it has now been proved, not only by vocabularies but by the internal structure of the language itself, that the Khassi of Assam is a member of the Môn-Annam family. He mentions four other groups, which will be referred to more fully hereafter, and then writes as follows:—

"To sum up the considerations of the Môn-Annam sub-family. There is a remarkable agreement between the vocabularies and structures of Khassi, Môn, Khmer, and other less important languages of the same sub-family.

"The resemblances between the Môn-Annam vocabularies and those, on the one hand, of the Munda languages and, on the other hand, of Nancowry and the Malacca dialects have often been pointed out. These are so remarkable and of such frequent occurrence that a connection between all these tongues cannot be doubted. The existence of such a connection must be considered as established. At the same time the structures of the two sets of speeches differ in important particulars. The Môn-Annam languages are monosyllabic. Every word consists of a single syllable. When in Khassi, for instance, we meet an apparent dissyllable, we find on examination that it is really a compound word. On the other hand the Munda, Nancowry and Malacca languages contain many undoubted polysyllables. This is a very important point of difference, for one of the marks by which languages are classified is the fact that they are monosyllabic or polysyllabic. Again, if we take the order of words in the Munda languages and compare it with that of Khassi and Mon, we find another important distinction. The Munda order is subject, object, verb, while in Khassi and Môn it is subject, verb, object. The order of words in a sentence follows the order of thought of the speaker, so that it follows that the Mundas think in an order of ideas different from that of the Khassis and the Môns.

"Owing to the existence of these differences, we should not be justified in assuming a common origin for the Môn-Annam languages on the one hand and for the Munda, Nancowry and Malacca languages on the other. We may, however, safely assume that there is at the bottom of all these languages a common substratum, over which there have settled layers of the speeches of other peoples differing in different localities. Nevertheless, this substratum was firmly enough established to prevent its being entirely hidden by them, and frequent undeniable traces of it are still discernible in languages spoken in widely distant tracts of nearer and further India. It will be understood how important this fact is from the point of view of ethnology."

Munda is the language of the Kols. Nancowry is a dialect spoken in the Nicobars south of the Andamans. The barest glance at a map will show that the discovery of a substratum so widely distributed and at the same time so elusive is indubitably of prime importance.

Groups of the Môn-Annam sub-family.

135. To consider now the groups of the Linguistic Survey. For convenience of reference I will call them—

(1) the Lower Middle Mèkong group,
(2) the North Cambodian group,
(3) the Khmer group,
(4) the Upper Middle Mèkong group, and
(5) the Khassi group.

136. With the first, third and fifth groups we have nothing to do. The languages and dialects comprised in them are spoken beyond the confines of Burma. Of the second, the north Cambodian group, only one is of immediate interest. It is the Môn or Talaing. The others are spoken in French Indo-China. Môn is more or less geographically isolated ; between it and the other members of the group there is a gulf fixed. It was cut off from them by the great Tai wave that came down from the north and had by the fourteenth century of the Christian era spread out over Siam. Talaing was returned on the 1st March 1901 as the language spoken by 155,100 persons, for the most part residing in the Pegu, Hanthawaddy, Thatôn and Amherst districts. The question of its tones has already been discussed. It only remains to observe here that it is rougher and more guttural than Burmese ; that the "r" sound is preserved and has not degenerated into a "y"; that a certain amount of Pâli has crept into its composition. In the matter of phonetic development it would seem to be at about the same stage as Arakanese. It has been reduced to writing, a modified form of the Burmese alphabet having been employed for the purpose.

North Cambodian group.

137. I give below Dr. Grierson's fourth or Upper Middle Mèkong group in full.

Upper Middle Mèkong or Wa-Palaung group.

Language or dialect.	*Where spoken.*
(1) Mi	... Neighbourhood of Kieng Khan.
(2) Khmu, Khamu, or Kha Muk	... Neighbourhood of Luang Phrabang. There are also some in Salween in British territory.
(3) Lemet	... Kiang Khong and Pakta.
(4) Palaung or Rumai ...	... Tawngpeng north-east of Mandalay and all over the Shan States.
(5) Wa or Wŭ	... On the upper course of the Salween ; also in Kēngtūng
(6) En	... Kēngtūng State, between the Salween and the Mèkong.
(7) Hsen Hsum	... Kēngtūng State, between the Salween and the Mèkong.
(8) Mōng Lwe	... Kēngtūng State between the Salween and the Mèkong.
(9) Hka-la or Ang-ku ...	... Mōng Yawng in Kēngtūng.
(10) Sôn	... Kēngtūng.
(11) Riang	... Mōng Sit State in Upper Burma.

These correspond almost exactly with Sir George Scott's Wa-Palaung languages, and a suitable alternative for the name of the group would be Wa-Palaung. Of the languages specified, the first, Mi, is apparently not spoken within the limits of Burma or the Shan States. I cannot find any reference to it in the *Upper Burma Gazetteer*, and the only vocabulary I have seen is that given in Garnier's *Voyage d'exploration en Indo-Chine*. The rest are spoken over the northern and eastern portions of the Shan States. The *Upper Burma Gazetteer* deals with the Hka Muks and the Hka Mēts (or, as the Shans call them, the Lemets) together. According to Garnier there is a real difference between the Hka Muk (No. 2) (his Khmous) and the Lemet (No. 3) forms of speech. It is the first of the two that has been illustrated in the Gazetteer. Under the name of Khamu this form was returned as the parent tongue of eight people in the Salween district at the 1891 Census. It was recognized then as a member of the Môn-Annam family. At the 1901 Census it was spoken by 75 persons in all. Closely connected with the Hka Muk is the dialect spoken in Mōng Lwè (No. 8), but there is probably almost as much Shan in it as Hka Muk. Two specimens of Riang, which is spoken in the north-eastern portion of the Southern Shan States, have been given in the *Upper Burma Gazetteer*. They are the Yang Sek and the Yang Wan Kun. There is a very close resemblance between the two. The speech of the Yang Lam, the third of three tribes into which the Riangs are divided, differs little from the first two forms. It seems, however, to have rather more Shan in its composition. Riang was the language ordinarily spoken by 4,490 persons at the 1901 Census.

Of the remaining dialects, Nos. 5, 6, 7, 9 and 10 are dialects of Wa. The guttural nature of these languages is one of their chief characteristics. It is

similarly one of the distinctive features of Palaung (No. 4). The Wa tongues are spoken down almost the whole length of the eastern portion of the trans-Salween Shan States. Mr. Stirling is responsible for the majority of the Wa vocabularies given in the *Upper Burma Gazetteer*. His Wa, as spoken in Kēng-tūng, differs to a marked degree from that given elsewhere in the Gazetteer, which is presumably a more northern variety. Two forms of Wa were returned at the Census, Wa proper spoken by 7,667 persons, and the vernacular of the Tai Loi (12,762 speakers). Vocabularies of three varieties of Palaung have been printed in that work, namely, (*a*) that spoken in the Shan States, (*b*) that spoken in the neighbourhood of Manton, and (*c*) the variety known as Nam Hsan; but Sir George Scott has no very exalted opinion of their utility, seeing that our knowledge of the language has filtered to us through a Burmese or Shan medium, and has "inevitably been coloured in the process." The speakers of Palaung numbered 50,504 on the 1st March 1901.

Danu or Danaw.

138. I have already observed above that I should be inclined to treat the tongue of the Danus or Danaws as a Môn-Annam language. The Danus and Danaws have been looked upon by some authorities as one and the same race. For my own part I am inclined to think that this is not the case. The Danus, who inhabit the borderland between the Shan States and Upper Burma, seem to have lost their speech and have degenerated into a hybrid Shan-Burmese compound. This is the case in the neighbourhood of Maymyo, where the last Danu-speaking elders are said to have died three years ago. Among the Danaws however, a separate language still survives. It is said to be a mixture of Burmese and Karen, in which the Burmese preponderates, and has been placed in much the same category as Taungthu. The vocabulary of Danaw given in the *Upper Burma Gazetteer* does not, to my mind, bear out this description. I can find little in it that denotes either a Burmese or a Karen connection. On the other hand, the tongue seems to contain a very considerable number of words which mark it as related to Wa, Palaung and other members of the Upper Middle Mèkong group of languages. A few of the most striking of these are given below. The Taungthu word is in each case given as well as the Danaw, and will show how slight the reputed connection between the two is compared with that existing between Danaw and the Môn-Annam varieties:—

English.	Danaw.	Hka Muk.	Riang.	Palaung.	Wa.	Taungthu.
Tongue ...	Tak ...	Tak ...	Tak ...	Sata—Kata...	Tak ...	Pri.
Water ...	Om ...	Om ...	Om ...	Em—Om ...	Rom ...	Ti.
Bird ...	Sim ...	Hsim ...	Sim ...	Hsim ...	Sun, Hsim	Wa.
Leaf ...	La ...	La ...	La-ke ...	Hla ...	La, 'Nla ...	Ala.
River	Parong ... / Om-laung ...	Hrawngom	Om-rawng ...	Um-rawng ...	...	Ti-krawng.
Wind ...	Kun ...	...	Kur ...	Hkun ...	Kŏ-a ...	Tali.
Spear ...	Plit ...	Plek ...	Plas ...	...	...	Bang.
Sword ...	Wik ...	...	Wait ...	...	Wè(k)-wai	Na.
One hundred...	Epaya ...	...	Spria ...	Upaiya ...	...	Tasya.
I ...	O ...	...	E or O ...	Ao ...	...	Kwe.
We ...	E ...	...	E ...	Ve ...	E ...	Kwe.
Thou ...	Mer ...	...	Mu or Mi ...	Mai ...	...	Na.
You ...	Per ...	...	Pe ...	Pe ...	Pe ...	Na.
Leg ...	Pli-sûng ...	Plo ...	Pli-chawng ...	Plo ...	Pari chawng	Kang-lawng.
Hand ...	Ti ...	Ti ...	Ti ...	Ti or Tai ...	Te or Tai...	Su.
Blood ...	Ngam ...	...	Nam ...	Hnam ...	Nam ...	Athwi.
Dog ...	So ...	Hsaw	Saw ... / Hsao ...	So ...	Hsaw ...	Twi.

Vocabularies are notoriously deceptive, but the above shows, I consider, an affinity that cannot be dismissed as fortuitous. If the resemblance were confined to a single language, one might be disposed to think that Danaw had been coloured by a mere geographical contact with a neighbouring Môn-Annam form of speech. As it is, however, the closest similarity is now with one and now with another of the languages in question and raises a very reasonable assumption that Danaw has a common origin with them. Only those Danaw words have been selected which

have their counterpart in more than one of the Môn-Annam languages. There are many others, however, which find an echo in only one of these tongues. It is curious that more often than not the single parallel is found in the Wa language. Instances of this phenomenon are—House—Danaw, *nya;* Wa, *nyai* or *nya*: Roof —Danaw, *plang;* Wa, *top-plawng*: to make—Danaw, *yawk,* Wa, *yok.* Now and then, as in the case of the word for 'moon' (*kato*) there is no similar word in any of the languages of the Wa-Palaung group, but an exact counterpart in Talaing. How the Danaw acquired their tongue is, and will be till our knowledge is much enlarged, to a certain degree a matter of conjecture. In all 18,994 persons were shown as ordinarily speaking Danaw at the 1901 Census.

Synopsis of Indo-Chinese languages.

139. Appended to this chapter is a synopsis of the principal languages and dialects of the Indo-Chinese family spoken in the province. It is not exhaustive. It does not for instance include Chinese or any of the trans-frontier forms spoken by temporary residents and foreign settlers except Siamese, Lao, Hka Muk and Lemet, which have been introduced and shown in brackets on the strength of the knowledge that we possess as to the precise position that is to be assigned to them. No attempt has been made to distinguish between languages and dialects. It is probable that before the next census the list will have been considerably amplified.

THE MALAY FAMILY.

Selon.

140. Of the languages of the Malay family only two, Cham (or Tiam) and Selon (or Selung), are vernaculars of the mainland of Asia. Cham is spoken by the aborigines of Cambodia and does not here immediately concern us. Selung is the speech of the sea gypsies of the Mergui district, and may be looked upon as one of the indigenous tongues of British India. It, in common with Cham, has a few points in common with the language of the Phillipines and, though exhibiting traces of contact with Malay and other neighbouring languages, possesses several marked original characteristics. Its speakers numbered 1,318 on the 1st March 1901. Dr. Grierson tells us that both Cham and Selon are probably the residuum of a tongue spoken at an extremely remote period by a prehistoric race on the Continent of Further India. It may be of interest to note what Logan said of Selon in 1851. The following is an extract from an article by that indefatigable scholar in the *Journal of the Indian Archipelago* of that year:—

"The language of the Silong of the Mergui Archipelago is mainly dissyllabic, but with a strong monosyllabic tendency. Its phonology, like that of the Simang, is a compound of Earlier West Indonesian and Ultra-Indian. It possesses several non-Indonesian combinations of consonants, such as *nh, mn, pn, dn, kn, km, gm, lm, pl, kb, kg, tk.* Some of these, however, are found in the more consonantal of the West Indonesian dialects, particularly in some Malayan and Borneon ones. Like these too, it affects long and compound vowels, *ui, ai, ae,* &c. Its finals are West Indonesian and with a higher proportion of consonants or about 70 per cent., which is the same as in the most primitive and consonantal of the North Indonesian, Micronesian and Melanesian languages."

Other vernaculars of India.

141. Of the remaining vernaculars of India there is but little of special importance to record. They will have received ample treatment at the hands of the other Superintendents of Census. I cannot flatter myself that the figures in Burma are likely to be of much more value than those relating to castes. It was not to be expected that any appreciable number of the indigenous enumerators of the province would know the names of more than one or two of the many languages of India they might be called upon to record, and without some such knowledge it would have been unreasonable to reckon on anything approaching accuracy. Dr. Grierson tells us in the preface to his "Indexes of languages" that an uneducated Native rarely knows the name of his own dialect. I would go further and say that, when dealing with foreigners who are unable, so to speak, to give him a lead, he would often appear to be ignorant not only of the name of the dialect of the language he speaks, but of that of the language itself. A substantial percentage of the Indian immigrants into Burma are uneducated and, as at the census the enumerator in nine cases out of ten was unable to help his man out, it is not surprising that a distressingly large number of

the entries recorded against natives of India in column 13 of the schedule (Language ordinarily used) were practically worthless. There was no expectation that a record of Indian dialects would be obtained, but it was hoped that where the language given was one of the well-known vernaculars such as Hindi, Bengali, Tamil or Telugu, it would be definitely shown as such in the schedule. I cannot say that even this hope was fully realized. I was at pains to issue to supervisors in those areas where there was a large number of native of India residents additional instructions in regard to these foreigners, among which figured a specific injunction to the effect that the words "Musalman" or "Hindu" were not to be shown in column 13, as they were not the names of languages. I cannot, however, say that I was much surprised to find when the schedule came in that the number of cases in which the words "Musalman" and "Hindu" had been entered in column 13 was enormous. Hindu frequently meant Hindustani, but as frequently probably Hindi and too often it was obvious from the context that it stood for neither of these but for either Tamil, Telugu or Bengali. "Musalman" was as a rule no guide at all. There were other entries that militated against a correct classification. "Kala saga" (ကုလားစကား) "the foreigner's tongue," was the last resource of many a desperate enumerator, while "Bingala" (ဘင်္ဂလား) "Bengali" was a term applied indiscriminately to the speech of persons from every portion of the Empire. The Madrasi coolies of the province are locally known as Coringhis and the fact that there was no Coringhi language seemed as difficult for enumerators to grasp as that the Chetties, the Sudras and some other castes were not the proud possessors of vernaculars of their own. On the whole the birthplace column gave a general idea of how to show doubtful languages and no pains were spared to gather from their surroundings what, in questionable cases, the correct entries should be, but it must be confessed that the net result was not wholly inspiriting. I trust that the enumeration of the above few difficulties out of the many that were encountered at this stage of the work of abstraction will enable my successor to anticipate and grapple with the most serious of them forearmed at the census of 1911.

Below is given a list of the principal Indian vernaculars and of the total number of persons shown as speaking them :—

Hindustani	95,122.	Bengali	204,973.	Tamil	99,576.
Hindi	28,689.	Punjabi	15,803.	Telugu	96,601.

Other vernaculars.

142. Of the vernaculars of Asiatic countries beyond India the only four of importance are Naipali, Chinese, Siamese and Malay. The strength of the population in whose mouths they were the "languages ordinarily used" were as follows :—

Naipali 5,463. | Chinese 47,444. | Siamese 19,531. | Malay 2,425.

Of European languages, English heads the list with 12,237 male and 6,263 female speakers. Portuguese shows 267 male and 23 female. Spanish was spoken by 106 males, mostly Manilla half castes engaged in the pearl fishery of Mergui, German by 104 males and 22 females and French by 63 of the former and 19 of the latter sex.

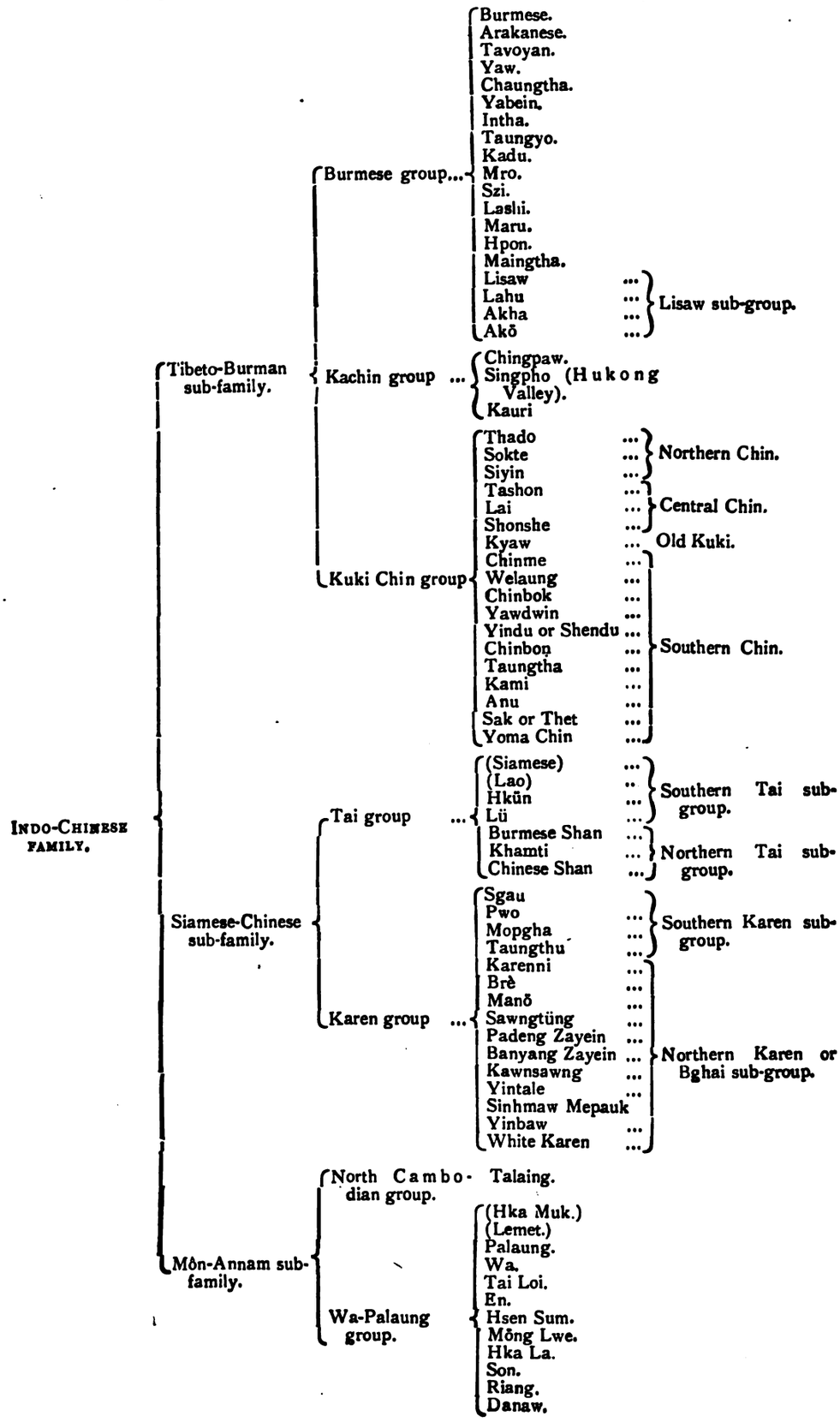
Vernacular publications.

143. Subsidiary Table No. VI-B appended to this chapter shows the number of books published in the vernaculars of the province during the ten years 1891—1900. It has been prepared with a view to giving a general idea of the progress or otherwise of vernacular literature during the decade under review and to throwing light upon the movement in favour of its revival. It must be borne in mind, however, that the figures exhibited in the table are not wholly the result of indigenous literary effort. Foreign missionaries are reponsible for a portion of the publications enumerated, and the totals include every work published in the selected vernaculars, whether alone or in combination with English. Burmese, it will be seen, heads the list with 701 publications. A large proportion of the Burmese publications are religious treatises. Next to Burmese comes Karen, with 42 publications. As might be expected, the Sgau-Karen books are far ahead of the Pwo in point of numbers. Kachin follows with eleven works, all published since the close of 1894. These are religious and educational and all from the pen of the Rev. O. Hanson of the American Baptist Mission. Among the eight Shan

works is included Dr. Cushing's Shan Bible, published in September 1892. The subordinate place occupied by Talaing is an unmistakable sign of the decay of that language, which no doubt in time will be a tongue of the past. The Chin work referred to in the table is a translation of the opening chapters of St. John's Gospel by Saya Pyizo. The Chin in question is apparently Yoma Chin or, as it is locally called, Saingbaung Chin. So far as they go, the figures tend to show that the low-water mark in vernacular literature during the past decennium was reached in 1894, and that since then there has been on the whole an increasing output of indigenous publications.

SUBSIDIARY TABLE NO. VI-A.

Synopsis of the Principal Indo-Chinese forms Spoken in Burma.



SUBSIDIARY TABLE NO. VI-B.

Number of Books published in the main Provincial Vernaculars during the ten years 1891—1900.

Language.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898	1899.	1900.	Total.
1	2	3	4	5	6	7	8	9	10	11	12
Burmese and Pâli-Burmese.	162	51	40	22	53	51	45	81	104	92	701
Pwo-Karen ...	1	3	...	...	...	1	1	...	1	...	7
Sgau-Karen ...	4	4	...	1	6	4	3	2	2	5	31
Karen (unspecified) ...	...	2	...	...	1	1	...	...	...	...	4
Shan ...	...	1	3	...	...	1	...	1	2	...	8
Talaing ...	...	...	...	...	...	1	...	1	1	...	3
Chin ...	...	...	...	...	...	...	...	1	...	...	1
Kachin ...	...	...	...	...	2	2	2	3	2	...	11
Total ...	167	61	43	23	62	61	51	89	112	97	766

CHAPTER VII.

INFIRMITIES.

Definition of infirmities.

144. The infirmities recorded at the recent Census were the same as at the preceding three enumerations, namely, insanity, deaf-mutism, blindness and leprosy. To qualify for entry in column 16 of the schedule it was necessary for the deaf-mute to have been deaf and dumb from birth, for the blind man to be totally blind, not blind of one eye only, and for the leper to be suffering from true leprosy, not white leprosy or leucoderma. Instructions with a view to securing correct entries in the case of the last three infirmities were included among the rules for enumerators printed in the inside cover of the enumeration book. No attempt was made in these rules to define what was and was not an insane for the purposes of the enumeration. The term "insane" was, as Mr. Baines points out in the opening paragraph of Chapter VII of his General Report, intended to include both the imbecile and lunatic, but, as the Burmese word employed in the schedule, ဆွဲး (*ayu*), a madman, is used indiscriminately for all classes of persons of unsound mind, no difficulty was caused in this province by the absence of a specific definition.

High Upper Burma figure in 1891.

145. One of the features of the returns of the 1891 Census under the head of infirmities was the extraordinarily large number of Upper Burmans shown as afflicted with insanity, blindness and leprosy. The following is a comparison of the 1891 average per 100,000 of each sex afflicted for Lower Burma, Upper Burma, Burma and India as a whole :—

	Insane.		Deaf-mutes.		Blind.		Lepers.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
Lower Burma	83	51	42	34	89	99	92	31
Upper Burma	124	127	79	66	317	416	160	81
Burma ...	98	82	56	47	178	229	117	52
India ...	33	21	90	59	164	171	68	23

The above figures show for all infirmities except deaf-mutism, that while Lower Burma was sometimes above, it was also sometimes below the Imperial average, whereas the Upper Burma figures were invariably above, and in only one case less than twice as high as the Indian figures. In one case they were more than six, and in two more than three times as high. The hot dry climate of Upper Burma accounts possibly for some of the discrepancy between the Upper and Lower Burma figures in respect of blindness, but in the case of leprosy and insanity it can hardly be urged that climatic factors can have caused any appreciable portion of the difference between the upper and lower sections of the province, or have placed the average so far above that for the Empire as a whole. There is, moreover, no apparent reason why glare should affect the eyes of women more than men, as would seem to have been the case in Upper Burma. Looked at in the light of the Lower Burma figures on the one hand and the Imperial figures on the other hand, there seems to be no question that an unduly liberal interpretation was in 1891 placed upon the terms "insanity," "blindness" and "leprosy" in Upper Burma. This fact was recognized in 1891 by Mr. Eales, who, in the concluding paragraph of Chapter VI of his Report, says :—

> "Judging from the figures of previous enumerations, we may expect a large decrease in the returns of all four infirmities in the Upper Province and especially in the returns of the blind and of lepers."

This expectation has been abundantly justified: it may even be said to have been more than justified, for not only have the Upper Burma figures been very substantially reduced, but those for Lower Burma have diminished also.

General decrease in infirmities in 1901.

146. The following are the 1901 figures per 100,000 of each sex afflicted in Upper and Lower Burma and Burma proper, excluding the Shan States and the Chin Hills, as compared with the figures for India as a whole in 1891 :—

	Insane.		Deaf-mutes.		Blind.		Lepers.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
Lower Burma	55	28	21	13	57	55	49	17
Upper Burma	73	67	50	34	198	222	82	40
Burma ...	62	44	32	22	109	124	61	27
India (1891)	33	21	90	59	164	171	68	23

If the returns of the recent census are to be relied on, we may take it that in Burma proper leprosy approximates very closely to the mean for India as a whole; that insanity is a good deal more prevalent than in most of the other portions of the Empire, that in blindness the province falls slightly, and in deaf-mutism very considerably, below the Imperial average. Now, in themselves the 1901 figures seem to be more likely to be correct than those of 1891, but, if the facts are truly stated, we find ourselves confronted by a general decrease in infirmities so notable, that a full examination of the causes that produced it seems called for. It is obvious to the meanest capacity that matters cannot actually have altered so much for the better during the past ten years as the data would appear to show. The extension of vaccination and a greater readiness to have recourse to hospital treatment have, we may trust, reduced the scourge of blindness, while segregation has without doubt arrested the spread of leprosy somewhat, but it cannot be urged that vaccination and segregation are responsible for more than a fraction of the difference in the totals for the two enumerations. In a word, the decline must be more apparent than real, and it remains to consider what causes can have operated to produce such vastly different returns, and to decide whether on the whole it is more probable that the figures were unduly inflated in 1891 or that there were improper omissions ten years later. In so far as there is a marked falling off in the figures for the later enumeration, the *onus probandi* clearly rests on the shoulders of the 1901 Superintendent; for, while the temptation wilfully to make incorrect entries is practically nil, the danger of overlooking the infirmities' column (column 16) is ever present both in the cases of enumeration and abstraction. As regards abstraction, for which I, and I alone, am responsible, I am not prepared to say that some portion of the decrease may not be due to the posters having missed entries in column 16. Placed, as that column is, at the edge of the schedule and almost hidden on the left-hand page when the book is doubled, it was inevitable that here and there an entry should evade even the most vigilant eye. In the administrative volume I am, in offering suggestions for improving abstraction at the next census, suggesting that the infirmities' column, which is but seldom filled up and is thus apt to be forgotten and overlooked, should be placed in a more conspicuous position in the schedule. If this suggestion is adopted an occasion for possible error will certainly be removed. When first comparing the infirmities' figures for 1901 with those for the preceding census, I was inclined, seeing what I had seen, to think that omissions had occurred on a very large scale in abstraction. A more careful scrutiny of the figures, however, coupled with an independent test of the totals for selected areas, convinced me that improper omissions constituted but a small portion of the decrease as a whole, and that the marked divergence between the returns of infirmities for the two enumerations actually existed before the enumeration books reached the Abstraction office. To ascertain what the motives were that prompted the people to return fewer infirmities at the recent than at the preceding census, one has but to turn to the 1891 Report, where they will be found fully indicated by Mr. Eales in connection with the marked difference between the Upper and Lower Burma figures for that year. He writes as follows :—

"In Upper Burma lunatic asylums are as yet unknown, hence there is less inclination to screen the imbecile from the view of the Government official.

* * * *

"The returns of Upper Burma, where no census was held before, show that in all probability persons but partially blind were entered as blind.

* * * *

"Leucoderma, or "Kayu Thin," is known by a separate name from true leprosy, which is known as "nu na," and more careful instructions in successive enumerations have produced more accurate returns in Lower Burma."

and again, in connection with the returns of blindness:

"* * and when the people understand there is no connection between the enumeration and taxation, we may hope for more accurate returns."

To put it shortly the falling off in infirmities shows that the "more careful instructions in successive enumerations" have produced the same effect in Upper as they have in Lower Burma. The Upper Burman has, during the decade under review, grown less unsophisticated, more intelligent, and more like the Lower Burman in the matter of the record of infirmities, while the Lower Burman has been more careful in his returns than at the previous census. This growth in intelligence was what was to be expected. Even as it is the check exercised in the Abstraction office has proved that some of the infirm who figured in the schedules ought not to have been shown there. In their zeal many enumerators entered the lame in column 16; the word ဝတ်ရုံးဖြစ် (wet-yu-pyan, epilepsy) was not unknown, and here and there the frank admission was made that the blind person shown as such was blind of one eye only. Entries such as these entailed a careful examination and constant weeding out, and there can be no doubt that, but for the scrutiny brought to bear when posting was in progress, the number of infirm shown in Imperial Table XII would have been much higher than it was.

To sum up: there was a surprisingly large diminution in the 1901 figures for infirmities as compared with those for 1891. A portion of the decrease may have been due to omissions in the 1901 Abstraction office and to the extension of vaccination and medical treatment, but the bulk was the result of causes similar to those which produced so singular a divergence between the returns for Upper and Lower Burma at the 1891 Census, the principal of which was more careful enumeration in the latter area. In 1891 the Upper Burma figures were admittedly abnormally high, and a large decrease at the succeeding enumeration was then anticipated. The decrease is probably even larger than was expected, but, as the figures as they now stand are, except in the case of deaf-mutes, either higher or only slightly lower than the 1891 figures for India as a whole, there seems to be no reason for doubting that they are fully as reliable as those returned at the 1891 enumeration, and give a fairly clear idea of the actual state of facts as regards the prevalence of the "scheduled" infirmities in Burma.

Insanity.

147. Inclusive of the afflicted in the Shan States and the Chin Hills there were 5,517 insanes in Burma on the night of the 1st March 1901. Despite the decrease adverted to above, the average is still high when judged by Indian standards, and the prevalence of madness has no doubt been rightly put down to the excitability and self-indulgence of the people of the country. As in 1891, more males were returned as mad at the recent census than females; the figures for the whole of the province are 3,209 and 2,308 respectively. This excess of males over females was common to both sections of the province. There was no preponderance of female over male insanes in Upper Burma, such as puzzled Mr. Eales in 1891. Subsidiary Table No. VIIA appended to this chapter gives a general indication of the distribution of insanity over the several political and natural divisions of the province. The Chin Hills take the highest place in the list with a percentage of 364 male and 336 female insanes in every 100,000 of each sex. Next to the Chin Hills come the Arakan Hill Tracts with 246 and 148 respectively. The extraordinarily large proportion of persons of unsound mind in the latter district attracted some little comment in the 1891 report, but any doubt that may then have existed as to the correctness of the figures for that year may now be said to have been set at rest by the 1901 returns. Rangoon comes next with 227 males and 97 females in every hundred thousand of each sex, but here, with a lunatic asylum, conditions are admittedly abnormal. What is really significant, however, is that after the above three districts come the Upper Chindwin and Pakôkku, that is to say, the other two districts of Burma besides Northern Arakan that border on the Chin Hills. If any inference is to be drawn from these figures it is that insanity is more than ordinarily rife in the uplands that separate Burma from Assam, Manipur and Bengal.

In his report on the 1891 Census in the Punjab Mr. Maclagan, the Provincial Superintendent, writes as follows in connection with insanity:—

"The distribution of this infirmity no doubt follows to some extent the distribution of goitre. The form of idiocy known as cretinism is constantly accompanied by goitre, and in parts of Ambala below the hills, the same word (jaggar) is said to be applied to an imbecile and to a person afflicted with goitre. Goitre is found mainly in the hills and in the south-west * * *."

We have it on the authority of Messrs. Carey and Tuck that goitre is prevalent in the Chin Hills, though confined to certain tracts, and that in some of the villages cretins are found "who go on all fours, mix with the pigs in the muck and are incapable of speech." We may therefore assume with some measure of confidence that the connection between goitre and insanity adverted to by Mr. Maclagan in 1891 exists in Burma also, and that it is cretinism that is responsible for the excess in the Chin Hills and in the adjoining areas over the average of persons of unsound mind. If any support to the above figures is required it is amply lent by the data contained in subsidiary Table No. VIIC which exhibits the average number of afflicted per 10,000 of each sex among the principal indigenous races of Burma. The insanity figure for the Chins (23 males and 20 females in every 10,000 of each sex) is far in advance of that for any other of the Burma-born peoples. The distribution of insanity in Burma is indicated in the maps appended to this chapter. A glance at these will show how much more madness prevails in Upper than in Lower Burma and in the west than in the east of the province. Proximity to the Chin country would seem inevitably to raise the proportion of persons of unsound mind. Outside the sphere of Chin influence the average of lunatics is, with one or two exceptions, low.

Insanity by age-periods.

148. On the whole the data regarding insanity by age-periods, as exhibited in Imperial Table No. XII, present much the same features as they did ten years ago. Unsoundness of mind is in Burma but seldom sufficiently pronounced in children of tender years to justify their classification as imbeciles. We thus find that, in a population of nearly ten millions and a half, there are only 67 children of less than five years of age who have been returned as insane. From five years onwards the totals increase rapidly till the 30—35 age-period is reached. After that, the general decline in numbers shows that the total of individuals whose insanity first declares itself in the riper years of life is comparatively small. We must not, however, overlook the fact that, though there is a diminution on the whole, the 40—45 age-period shows in the case of females a higher proportion of insanes than the quinquennium immediately preceding it. I doubt whether any cause can be assigned for this temporary rise other than that indicated in paragraph 123 of the 1891 report, namely, what is known as the "change in life."

Subsidiary Table No. VIIB appended to this chapter shows the proportion of female to male insane at each age-period. In nearly every period and in the aggregate the males predominate. In the 2—3 age-period alone do the females exceed the males to any marked extent. The totals, however, are far too minute to allow of any inferences being drawn from them. They are for the age-period in question two only for the stronger and six for the weaker sex. It is only when expressed in the terms of this table that they can be said to attract attention.

Deaf-mutism.

149. In the whole of the province 2,843 deaf-mutes were returned as such at the 1901 enumeration. This aggregate is lower even than the 1891 total (3,904), which was not considered by any means high. As has been pointed out in the 1891 report, the figures for this infirmity have been steadily declining for many years past. In 1872 the proportion of deaf and dumb to every 100,000 of each sex was 160 in the case of males and 100 in the case of females. By 1881 this ratio had fallen by more than half, namely, to 70 and 50 respectively. In 1891 the proportion again decreased to 55 and 47, and the recent enumeration has witnessed a still further reduction to 33 and 22 deaf-mutes respectively in 100,000 of each sex. In the past it has been claimed that the successive diminutions were the result of more

scrupulous enumeration. Though, as I have remarked in an earlier paragraph of this chapter, I think it possible that some slight portion of the latest falling off may have been occasioned by omissions in the Abstraction office due to the overlooking of entries in column 16, I see no reason for refusing to give the enumerators credit for the exercise of a somewhat keener critical faculty in connection with the entry of deaf-mutes in the schedule than was displayed at the census of 1891. In fact, I consider that the figures on the whole are probably a very fairly accurate picture of the facts as they actually exist. They at any rate bear no signs of the handiwork of any zealot like the enumerator of 1881, who included or attempted to include in the category of deaf-mutes all infants who were too young to speak. In this infirmity the males exceed the females to an even greater extent, it may be noted, at the last than at the preceding enumeration. In 1891 the totals were 2,150 males and 1,754 females; they are now 1,731 males and 1,112 females. It is worthy of remark that, after Bhamo, deaf-mutism is commonest in those areas of Upper Burma which we have seen suffer most from insanity, namely, the Chin Hills, Pakôkku and the Upper Chindwin district. We may take it, I think, that a portion of the deaf-mutism existing in the province can be traced back to the cretinism which has swelled the number of insanes on the western border. Possibly the high figures for Bhamo (142 males and 100 females to every hundred thousand of each sex) may be accounted for in somewhat the same manner. Of Lower Burma districts Northern Arakan has (as would be expected if the above assumption were correct) the largest proportion of deaf-mutes. Here the ratio is 47 and 69 for every hundred thousand of the male and the female sex respectively, but, as I shall show in a later paragraph, the total population of this district is so insignificant that it would be dangerous to theorize on the infirmity figures it has returned. There are rather a large number of deaf-mutes in the Northern Shan States, whereas the Southern Shan States are, or seem to be, comparatively free from this infirmity. The local census reports, however, tend to throw some discredit on the figures for the latter region. Mr. Stirling tells us that there was in his charge a tendency to omit the afflicted generally from the schedules. No doubt it was the discovery of this tendency and the measures taken to counteract it that have sent up the Northern Shan States ratio. That deaf-mutism is generally more prevalent in the north than in the south of the province, I do not doubt. I cannot, however, believe that the figures for the Southern Shan States are in reality as much lower than those for the Northern Shan States as the returns would appear to show. In Lower Burma the difference is, of course, partly due to the large immigrant able-bodied population. Of indigenous races the Kachins show the highest proportion of deaf-mutes—11 males and 8 females in every 10,000 of each sex. This in itself is sufficient to explain the position Bhamo holds in the list of districts.

Deaf-mutism by age-periods.

150. The only feature of importance in the age-period figures under the head of deaf-mutism is the comparatively high age at which the maximum of afflicted is reached. After the first year of life among the males there is a steady increase in the totals of deaf and dumb till after the 15—20 age-period has been attained. Among the females the highest figure is reached rather earlier, namely, at the 10—15 age-period. Much the same phenomenon presented itself in 1891, when Mr. Eales justly pointed out that, in the case of a congenital affection like deaf-mutism, the maximum should of right be found in the earliest quinquennium, and gave as an explanation for the meagre returns for the early years of life the fact that, with some deaf and dumb children, it was not till their infancy was over that the existence of their infirmity was fully established. This cannot, however, be urged when the total is seen to be still rising during the second and third quinquennia of age. There certainly would appear to be something amiss in the figures, for it seems hardly conceiveable that any doubt should exist as to the faculties of a child who has reached the age of 15. There can be no question, I think, that, in the earlier age-periods, all who should have been returned as deaf and dumb have not been shown as such in the schedules. There is, however, no very marked difference between the returns for the 10—15 and the 15—20 age-periods in the case of males, and I doubt whether the number of omissions is anything very great. It

is in any case satisfactory to note that there is no rise in the latter age-periods, such as that which was apparent in the Indian figures for 1891, and which Mr. Baines then put down to the inclusion among the deaf and dumb from birth of those who had actually lost their hearing during the closing years of life. As in the case of insanity, the males among the deaf-mutes exceed the females in very nearly all of the age-periods. In this regard subsidiary Table No. VIIB presents no features of special interest.

Blindness.

151. There appear to be two main causes of blindness in Burma: the first of these is the glare of the sun, the second is small-pox. As regards the former Mr. Baines has, in his General Report for 1891, pointed out that the axiom that drought and glare bear a direct relation to eye affections does not always find support in India as a whole. For all that, however, the conclusion that he arrives at after a careful weighing of the matter is that, "on the whole the statistics for different parts of the same province " * * * seem to indicate that blindness is more prevalent, as a "rule, in hot and dry tracts and less prevalent in mountain air and within the in- "fluence of the heavier rain currents." The soundness of this conclusion would seem to be amply borne out by the statistics of blindness provided by the recent enumeration. On no other assumption can we explain why the ratios per hundred thousand of each sex in the Upper Burma dry division should be 205 for males and 230 for females, while in the Upper Burma wet division they are 109 and 108, and in the Lower Burma littoral division 46 and 39 respectively. A perusal of Subsidiary Table No. VIIA will show that ordinarily the dryer the district the larger the tale of blind. For the provincial maxima we have, as a rule, to go to arid districts like Pakôkku, Myingyan and the Lower Chindwin, while moist areas, such as Salween, Thatôn and Amherst, furnish the minima. I say "as a rule" in regard to the maxima because, as a matter of fact, Northern Arakan, a wet area, supplies the very highest figures for the province—426 blind males and 326 blind females per 100,000 of each sex. The data for this district are at first sight almost alarming. It must be borne in mind, however, that they are calculated on so small a population that they are no adequate test of the extent of the affliction. When it comes to examining the actuals, the figures give no cause for apprehension. A total of 45 male and 33 female blind in a district numbering 20,682 souls all told is, on the face of it, almost as little a matter for concern as for congratulation, even though when worked out proportionally it assumes the dimensions referred to. After Northern Arakan and Thayetmyo (where conditions prevail similar to those obtaining in the dry zone) the highest proportion of blind in any Lower Burma district is in Prome, and this takes us to the second of the main causes of blindness adverted to above. For many years prior to the 1891 enumeration Prome enjoyed a somewhat unenviable reputation for small-pox, and I think that it can be hardly doubted that the large proportion of blind in this district is a legacy of successive epidemics in the past. Vaccination has done wonders during the last decade in reducing the virulence of the disease in the Prome district, and next census should see a substantial diminution in the total of blind. Small-pox is doubtless responsible for a good deal of the blindness returned in the other damp areas of the province. Reading subsidiary Table No. VIIC in the light of the above remarks, there is nothing to surprise us in the fact that the Burmans are more liable to blindness than any of the other indigenous races, and that the Shan show the next highest figure in regard to the average of afflicted.

The figures contained in subsidiary Table No. VIIB show that, on the whole, and especially in the latter years of life, females were in 1891 more liable to blindness than males. The cause for this greater susceptibility of the weaker sex, which was apparent also at the preceding enumeration, has been touched upon in the 1891 report, but Mr. Eales does not appear to have found any of the theories that have been adduced to account for it particularly convincing. In view of the fact that in 1881 the male blind exceeded the female blind in British Burma, the proportion being 107 of the former to every 100 of the latter, it seems probable that the factors, physiological or otherwise, that determine the relative extent of blindness in each sex have yet to be traced.

Blindness by age-periods.

152. Unlike the figures for the other infirmities which show a continued falling off after a certain age has been reached, the ratios of the blind to the total population maintain an almost uninterrupted rise up to the last. This does not mean, as it would in the case of deaf-mutism have meant, that the blind die off more slowly than those who have not lost their sight, but merely that each year the ranks of the blind receive reinforcements from those who have not up till then lost their eyesight at a rate more rapid than that at which they are depleted by death. We thus find that, of the total of blind in the province on the 1st March 1901, that is to say, out of 5,556 males and 5,966 females, no less than 1,871 males and 2,855 females are of the age of 60 and over. In 1891, it may be noted, the proportion borne by these aged blind to the total afflicted was even larger, being 39·1 and 52·3 per cent. as compared with 33·6 and 47·9 in 1901. The high percentage of the afflicted among the females seems a further indication of the fact that a very large portion of the blindness in the province is to be classed as senile, and the divergencies in the totals of blind women of 60 years and above at the last and at the preceding enumeration (2,855 against 4,477) are significant of the scope that exists for difference of opinion as to whether this or the other dim-eyed crone should properly be treated as blind or not. To me the figures show conclusively that the test applied at the recent census was stricter than that applied ten years earlier.

Leprosy.

153. According to the returns there were 2,940 male and 1,250 female lepers in Burma on the 1st March 1901. Here, as in the case of the other "scheduled" infirmities, there is a notable decrease on the figures for the previous census, when the totals were 4,543 and 1,921 for the two sexes. It is rather early in the day to ascribe much of this decrease to the benefits of segregation effected by the leper asylums, of which there are two in Mandalay and one in Rangoon. The difference is, I believe, mainly due to more careful enumeration, but I should hesitate to say that we should not be justified in according the excellent institutions referred to some small portion of the credit for the improvement in the figures. By the next census it is to be hoped that they will have made their influence indisputably felt. The map showing the distribution of leprosy appended to this chapter shows that this disease, like insanity, appears to prevail more in the west than in the east, and to flourish more in the dry than in the wet areas of the province, though it is Northern Arakan that shows the highest percentage of lepers to total population. For the reasons assigned above in the case of blindness, I should not be disposed to attach any great importance to the Northern Arakan figures. There seems, however, to be no direct relation between rainfall and leprosy; for though the Upper Burma dry division shows by far the highest figures (82 males and 39 females per 100,000 of the population), the Lower Burma littoral figures are higher on the whole than those for the Upper Burma wet division. In every district in the province except one (Myitkyina) the male exceed the female lepers in number, in most cases very largely. The Myitkyina figures are small, far smaller than the average, and are possibly slightly defective. For the province as a whole the ratio is 56 males and 25 females in every 100,000 of the sex concerned. Subsidiary Table No. VIIC tells us that the ravages of leprosy are more marked among the Chins than among any other of the indigenous races of the province.

Leprosy by age-periods.

154. Turning to the figures for leprosy by age-periods we find that, up to the age of 10 there is comparative immunity from the disease; and the fact that the totals for the second quinquennium are lower than those for the first, strikes one as an indication that, of the few children that are attacked in early life, a fairly large proportion are liable to succumb before very long to disease in some form or other. With the entry into the third quinquennium the proportion of lepers rises very considerably—the increase being more marked among the males than the females—and continues to rise on the whole till the 30—35 age-period is reached. After this death carries away more from the total than disease adds to it, so that, from 426 males and 150 female lepers in 100,000 of each sex, the proportion dwindles down to 126 and 56, respectively, at the 55—60 age-period. The data show what is manifestly clear from independent evidence, namely, that lepers are a short-lived race. The age-period

proportions given in subsidiary Table No. VIIB would appear to point to the inference that, on the whole, the symptoms of the disease declare themselves a trifle earlier in the case of female than in the case of male children. As in the case of the insanity figures adverted to earlier, however, the actuals are far too microscopic to afford a basis for anything in the shape of generalities. In the later age-periods the totals are, perhaps, just large enough to afford reasonable grounds for the view that female lepers are slightly longer lived than male.

SUBSIDIARY TABLE NO. VIIA.

Average number of afflicted per 100,000 of each sex by Districts and Natural Divisions.

Districts and natural divisions.	INSANE.		DEAF-MUTES.		BLIND.		LEPERS.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1. Bhamo ...	43·3	42·1	142·0	100·0	69·8	81·6	7·2	5·2
2. Myitkyina ...	33·0	51·5	22·0	38·6	52·2	93·3	2·7	6·4
3. Katha ...	59·9	55·7	46·0	27·8	165·9	186·1	57·6	33·4
4. Ruby Mines ...	33·1	15·1	33·1	22·7	126·5	91·1	8·2	2·5
5. Upper Chindwin ...	124·4	157·6	115·3	64·6	163·3	182·1	66·1	37·4
6. Northern Shan States ...	51·1	59·9	88·0	59·1	198·1	201·2	34·0	25·1
7. Southern Shan States ...	27·2	26·8	19·3	11·5	63·6	53·1	17·8	8·9
8. Chin Hills ...	363·7	336·1	90·3	38·6	44·0	36·3	67·1	22·7
UPPER BURMA, WET ...	62·4	65·3	53·2	33·1	109·0	108·0	30·1	17·1
1. Pakôkku ...	101·8	94·5	93·5	56·3	272·9	318·0	66·7	35·6
2. Minbu ...	92·2	79·0	57·3	35·3	187·2	217·2	104·8	54·3
3. Magwe ...	83·9	81·5	61·3	49·3	209·8	245·3	99·8	52·5
4. Mandalay (rural) ...	62·3	50·5	27·8	20·4	163·7	148·5	67·9	26·9
5. Shwebo ...	56·6	45·7	40·2	17·0	164·8	156·3	46·9	26·1
6. Sagaing ...	84·0	77·7	33·3	22·5	211·1	211·2	103·7	53·1
7. Lower Chindwin ...	63·1	49·8	45·1	22·0	246·0	284·9	93·4	35·6
8. Kyauksè ...	75·0	44·4	24·5	30·6	209·1	186·3	41·8	27·8
9. Meiktila ...	39·4	45·0	21·8	20·2	101·6	148·5	46·2	27·7
10. Yamèthin ...	53·2	52·9	28·2	21·9	124·6	151·4	39·0	20·3
11. Myingyan ...	80·1	74·1	53·8	40·7	242·1	304·9	150·0	53·9
UPPER BURMA, DRY ...	73·3	65·5	47·2	31·7	204·6	230·3	81·7	38·8
1. Akyab ...	50·3	34·1	27·9	14·0	28·3	20·1	10·0	8·4
2. Northern Arakan ...	246·2	148·4	47·4	69·1	426·2	325·9	388·3	227·1
3. Kyaukpyu ...	66·6	36·4	20·9	11·3	41·9	31·9	17·2	11·3
4. Sandoway ...	56·5	33·3	21·7	8·8	32·6	15·5	10·8	2·2
5. Hanthawaddy ...	35·9	21·5	19·1	10·5	76·7	66·5	63·6	21·1
6. Pegu ...	20·1	13·4	18·5	8·3	50·2	49·2	43·1	15·9
7. Bassein ...	38·2	18·1	23·5	9·0	27·4	20·8	62·2	19·7
8. Myaungmya ...	43·4	18·7	27·0	13·8	52·8	54·0	94·3	31·1
9. Thôngwa ...	54·7	21·9	22·1	16·5	58·9	68·6	64·6	19·2
10. Salween ...	10·2	10·8	20·5	5·4	10·2	27·2	15·4	...
11. Thatôn ...	15·5	12·2	14·4	8·5	29·9	7·3	18·3	9·7
12. Amherst ...	31·7	15·4	12·8	12·4	24·4	17·6	24·4	5·8
13. Tavoy ...	23·8	25·2	7·3	12·6	47·6	32·4	9·0	3·6
14. Mergui ...	32·4	16·4	17·2	7·0	36·7	21·1	8·6	2·3
LOWER BURMA, LITTORAL ...	39·8	22·1	20·7	11·9	46·2	39·4	44·5	16·1
1. Tharrawaddy ...	47·7	23·1	17·9	12·3	62·1	79·1	42·7	11·3
2. Prome ...	67·0	37·0	20·6	16·4	118·9	92·6	77·0	21·7
3. Henzada ...	63·7	34·5	31·8	16·8	80·7	66·7	81·5	29·2
4. Toungoo ...	38·2	25·8	27·8	15·5	77·9	70·0	30·6	6·6
5. Thayetmyo ...	64·7	56·3	14·4	14·0	99·2	133·3	47·9	28·1
LOWER BURMA SUB-DELTAIC	56·8	34·2	23·4	15·2	86·3	84·7	59·0	20·0
BURMA RURAL ...	55·6	44·9	33·8	22·1	106·4	117·5	54·6	23·9
1. Rangoon town ...	226·5	96·6	13·8	14·4	35·0	62·0	52·5	28·8
2. Mandalay town ...	42·7	33·2	9·6	12·1	157·0	152·9	112·1	56·5
UPPER BURMA (WITH SHAN STATES, &c.). ...	68·0	64·3	47·8	31·4	167·4	185·4	63·9	32·0
LOWER BURMA ...	55·1	28·1	21·1	13·0	57·4	55·0	49·3	17·8
TOTAL PROVINCE ...	60·7	45·4	32·7	21·8	105·1	117·4	55·6	24·6

SUBSIDIARY TABLE NO. VIIB.

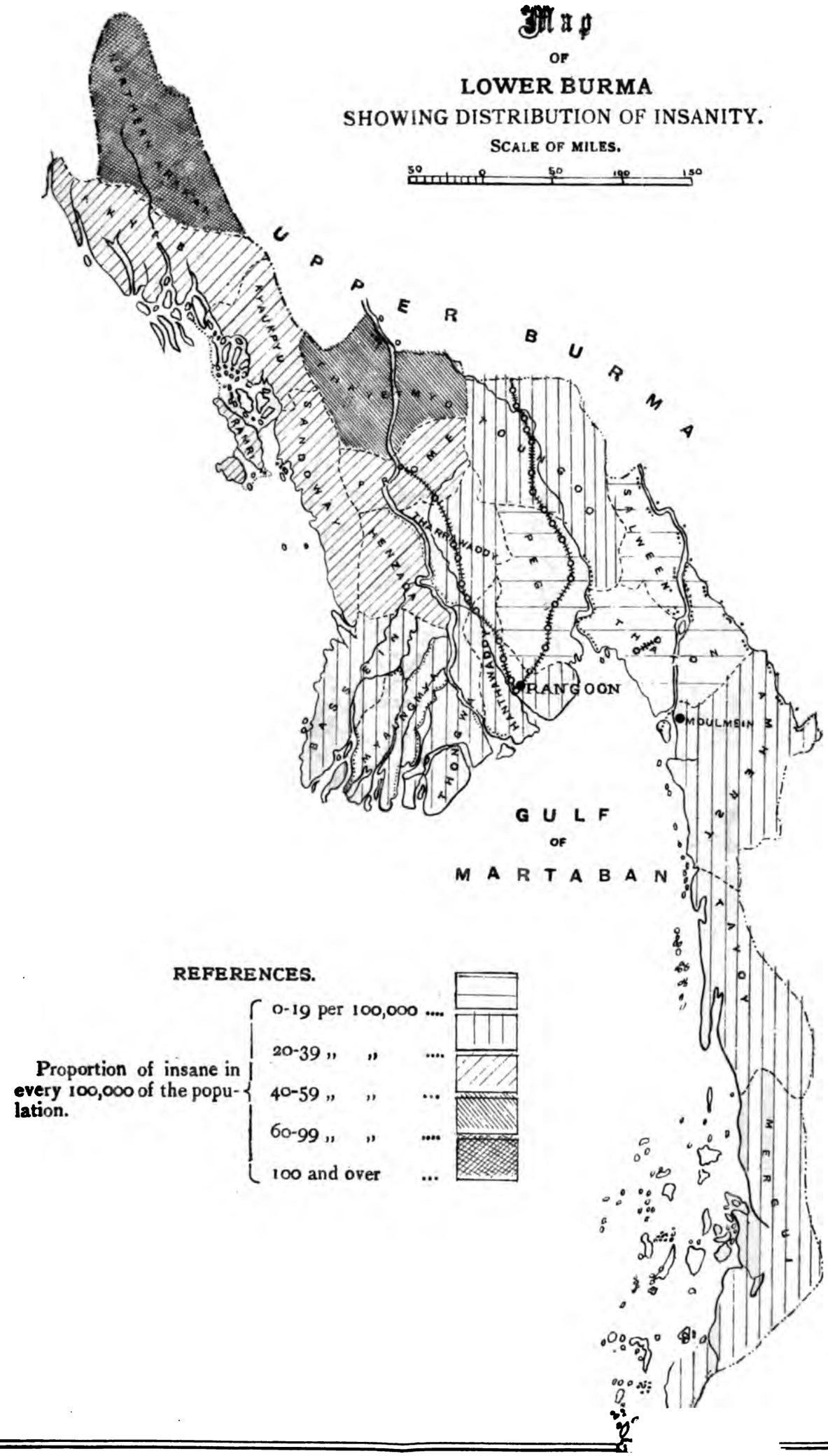
Proportion of Females afflicted to 1,000 Males at each age-period.

Age-period.	Total population (females afflicted to 1,000 males afflicted).	Insane.	Deaf-mutes.	Blind.	Lepers.
1	2	3	4	5	6
0—1	725	364	824	714	1,000
1—2	952	333	1,000	1,000	1,333
2—3	1,000	3,000	143	1,333	...
3—4	656	1,100	900	514	444
4—5	640	727	545	676	625
Total 0—5 ...	730	811	661	746	697
5—10	634	727	642	575	833
10—15	659	821	683	569	554
15—20	617	728	508	667	519
20—25	588	568	537	771	453
25—30	560	565	622	848	328
30—35	596	632	585	879	352
35—40	592	621	567	770	398
40—45	696	699	819	967	344
45—50	691	746	635	865	364
50—55	853	1,046	648	1,006	462
55—60	931	793	1,278	1,107	444
60 and over	1,343	1,073	766	1,526	617
Total ...	792	719	642	1,074	425

SUBSIDIARY TABLE NO. VIIC.

Average number of afflicted per 10,000 of each sex among the principal indigenous races of Burma.

Race.	Insane.		Deaf-mutes.		Blind.		Lepers.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7	8	9
Arakanese	7	4	3	1	3	2	1	1
Burmese	7	5	4	2	14	15	7	3
Chin	23	20	7	4	9	9	11	4
Kachin	3	2	11	8	2	5	1	...
Karen	3	1	1	...	2	2	3	1
Shan	4	4	5	3	13	12	3	2
Talaing	3	1	2	1	3	2	3	1
Taungthu	3	2	2	1	2	2	1	...
Total ...	6	5	3	2	11	12	6	3


Map
OF
LOWER BURMA
SHOWING DISTRIBUTION OF INSANITY.
SCALE OF MILES.
50 0 50 100 150
NORTHERN KACHIN
UPPER BURMA
AKYAB
ARAKAN
PAKOKKU
SANDOWAY
THAYETMYO
PROME
TOUNGOO
SALWEEN
KAREN
HILLS
HANTHAWADDY
PEGU
RANGOON
MOULMEIN
THONGWA
BASSEIN
MYAUNGMYA
AMHERST
TAVOY
MERGUI
GULF
OF
MARTABAN
REFERENCES.
Proportion of insane in every 100,000 of the population.
0-19 per 100,000 ....
20-39 „ „ ....
40-59 „ „ ...
60-99 „ „ ....
100 and over ...

Map

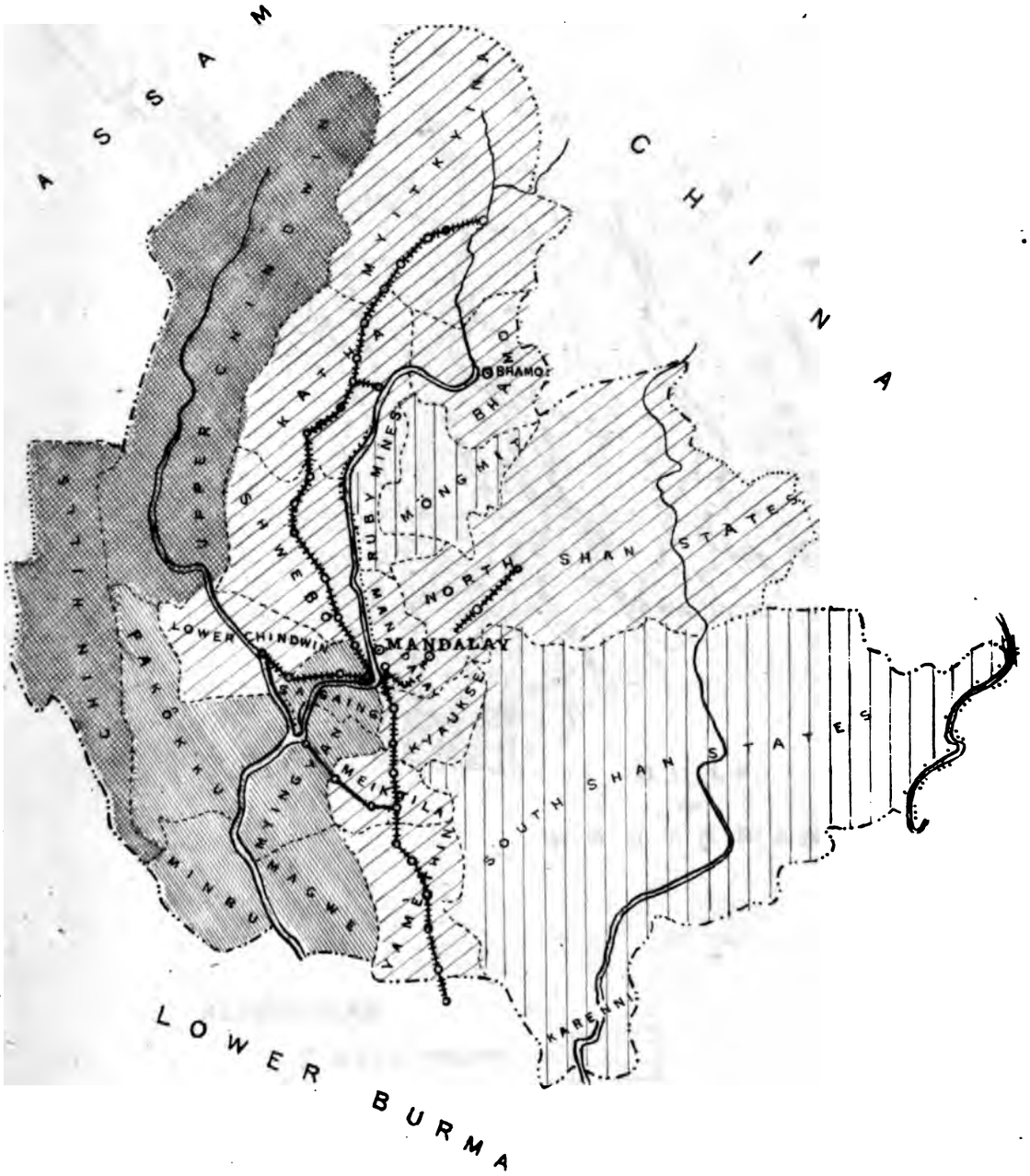
OF

UPPER BURMA

SHOWING DISTRIBUTION OF INSANITY.

SCALE OF MILES.

50 0 50 100 150



REFERENCES.

Proportion of insane in every 100,000 of the population.

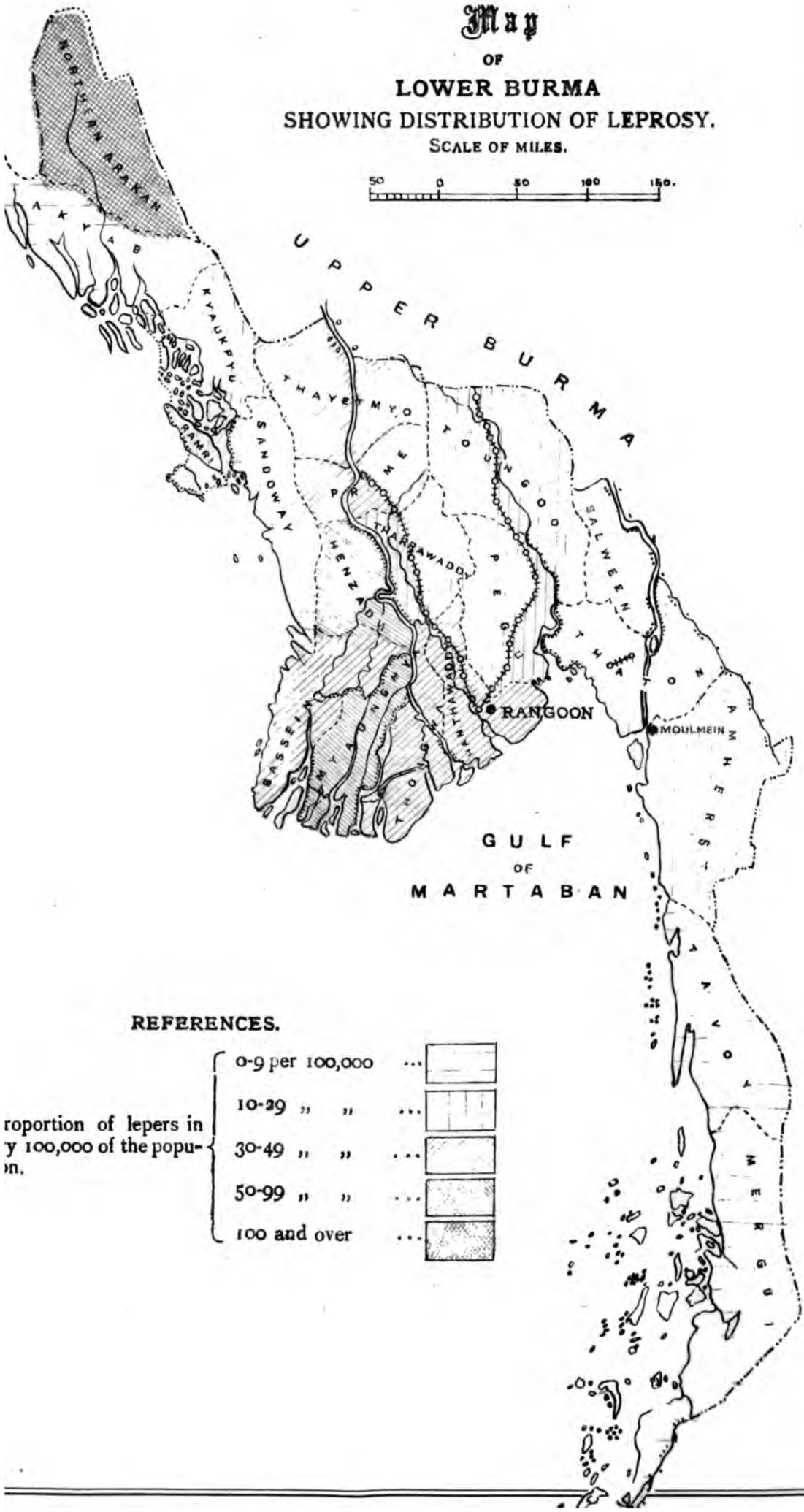
- 0-19 per 100,000 ....
- 20-39 „ „ ....
- 40-59 „ „ ...
- 60-99 „ „ ....
- 100 and over ...

P.T. CENSUS 14-5-02—1,210.

Map
OF
LOWER BURMA
SHOWING DISTRIBUTION OF LEPROSY.

SCALE OF MILES.

50 0 50 100 150.



REFERENCES.

roportion of lepers in
y 100,000 of the popu-
on.

- 0-9 per 100,000 ...
- 10-29 „ „ ...
- 30-49 „ „ ...
- 50-99 „ „ ...
- 100 and over ...

Map

OF

UPPER BURMA

SHOWING DISTRIBUTION OF LEPROSY.

SCALE OF MILES.

50 0 50 100 150

REFERENCES.

Proportion of lepers in every 100,000 of the population.

0-9 per 100,000	
10-29 „ „	
30-49 „ „	
50-99 „ „	
100 and over	

CHAPTER VIII.

CASTE, TRIBE AND RACE.

Caste in Burma.

155. In paragraph 8 of Home Department Resolution No. 30-32, dated the 2nd April 1900, which deals generally with several important questions connected with the Census, the following passage occurs :—

"In order to simplify the final tables and expedite the publication of the results, Mr. Baines has proposed that the heading for caste should be omitted (from the 1901 schedule) and the returns of 1891 made use of 'as a standard until 1911.' The balance of opinion, however, is strongly in favour of retaining that heading, and the Governor-General in Council accepts that view both on the general ground taken by Sir K. Seshadri Iyer that 'the whole social fabric of India rests upon caste,' and for the special reason that the caste statistics afford the best clue to the progress of the movement which Sir Alfred Lyall describes as 'the gradual Brahmanizing of the aboriginal, non-Aryan or casteless tribes' and to the changes in respect of widow and infant marriage, which are known to be going on."

Infant marriage, the re-marriage of widows and the Brahmanizing of aboriginals are not matters with which the rulers of Burma have any direct official concern, and Mr. Baines's proposal would no doubt have been welcomed in this province, for, as in 1890 so in 1900, it was represented unofficially that, so far as caste was concerned, the returns for Burma would be of very little value. Uniformity had, however, to be preserved ; and as, for the reasons indicated above, the caste column was prescribed for the rest of India, it was necessary for Burma to follow suit, doing the best with the material available that circumstances allowed of.

156. In paragraph 225 of his 1891 Report Mr. Eales thought it more than probable that the recording of caste would not be again attempted at another Census, and was, for that reason, of opinion that it was just as well that the experiment of returning it had been made then. In his opinion the result of the attempt made in 1891 was not altogether discouraging, for the enumeration books showed that the fulness and accuracy of the returns had exceeded every expectation. As regards fulness, the same might be said of the data furnished at the present Census, for in practically every case column 8 has been filled up in some fashion or the other for Hindus. Whether the entries are really an approximation to accuracy is, however, another matter. Having regard to the intellectual equipment of the average Burman enumerator, the point seems open to the very gravest doubt. It must be borne in mind first and foremost that the Burman has, save with very rare exceptions, no idea whatever of the precise meaning of the word "caste." He has no corresponding expression in his own vernacular. Indeed, being, as the author of *The Soul of a People* tells us, "so absolutely enamoured of freedom that he cannot abide the bonds that caste demands," the need for an indigenous word has never been felt by him. "Zat" is the term he has learnt to use when occasion arises, though what exactly he means by "Zat" he would, in nineteen cases out of twenty, be at a loss to say. Of religions he has no doubt some idea. There is the Buddhist religion, he will tell you ; the religion of the Nat worshippers, as well as those of the Christians and of the "kalas" (his name for the Native of India). This would, as a rule, complete his list, though, if further questioned, he might even go to the length of specifying two "kala" religions, the Hindu and the Musalman, to which, on reflection, he might conceivably add a third, the Muhammadan. Of the meaning of sect he has a glimmering, and, if pressed for a definition, might throw out a suggestion that "Zat" and sect were synonyms, but the probability is that he would eventually be found to describe "caste" by "Amyo" အမျိုး (race) or some other expression that wholly ignored its social characteristics. Hence, when it came to preparing instructions for the guidance of the lower grades of Census officers, there were from the very outset difficulties to be

Difficulty of recording caste in the province.

overcome. To attempt to compress into a ten or even a twenty-lined paragraph a definition of caste that would be sufficiently lucid for a Burman enumerator of ordinary attainments, would have been an absolutely hopeless task. On the other hand, to hint that caste was more or less connected with a traditional occupation, would have been to court disaster. The connection would have been misinterpreted, the social aspect would again have been overlooked, and the enumerators would inevitably have ended by showing occupation instead of caste. All that could be done in this regard for the guidance of Census officers was to give supervisors examples of a few of the commonest castes and to leave them to watch over and control their enumerators in this portion of their work as best they could.

Misleading answers and errors in transliteration.

157. It could be urged, of course, that it was perfectly immaterial whether the enumerator knew what caste meant, provided he was able to ask the native of India concerned what his "Zat" or caste was, and to put down the answer, as given, in black and white in the schedule. This no doubt is so, and, all things considered, it is surprising how often it has been possible for the first of the above conditions to be fulfilled. By means of that mysterious sympathy—the despair of the average European—which enables Asiatics of all kinds to communicate with one another with apparent freedom on the veriest minimum of a common vocabulary, the Burman enumerator has doubtless, despite his ignorance of the alien's tongue, generally succeeded in making his native of India understand that what he wished to ascertain was his "Zat" or caste. It is here that the real difficulty begins. If the person questioned were inclined to set any store by his caste, it would be to his interest to see that an intelligible answer was given. He might, no doubt, give himself what Mr. Eales has aptly called "brevet rank," but that some caste or other was shown and that a caste that was not lower than the correct one would be a point on which he would insist. Unfortunately the Hindu, whom the average Burman enumerator encounters in the execution of his duties, is not usually of the class which has any social position to establish. He is apt, either through ignorance, false shame or sheer perversity, to put the enquirer off with a reply which, if not actually untrue, is equivocal or misleading, and which the enumerator's ignorance does not allow of his criticizing. From personal experience I know that in Burma a low-caste man, when asked his caste will, in the first instance, very frequently reply "Hindu." A little further questioning will generally result in the caste being given, but to the Burman the idea of further questioning does not suggest itself. For him "Hindu" is quite sufficient. The word is familiar. Has it not already figured in column 4? Is it not mentioned in the heading of column 8? It is clearly an authorized expression; down it goes in the latter column, and in tabulation the caste has to be shown as "Not returned." Of the 58,073 entries of castes "Not returned," the majority are due to circumstances such as the above. Assuming, however, that the Hindu actually names his caste, the difficulty of transliteration comes in. The name is as often as not heard indistinctly in the first instance; unfamiliar sounds are Burmanized now in one way, now in another, and the result is often heart-breaking. When it is borne in mind that the only final consonant sounds that Burmese possesses are practically four (*k, t, n* and *ng*), that the two first are almost undistinguishable, that all four exist only in combination with certain vowel sounds, that, except in Arakanese, there is no "r" sound at all, and that the alphabet lacks both "f" and "v," it is obvious that the scope for variety in the rendering of words like Pariah, Rangrez, Bhumij and Vannan (to take a few of many instances) is enormous. It is true that the number of castes is so great that it is very nearly always possible to discover in an entry an apparent identity with some one or other of the caste names, but the known distribution of castes cannot be wholly ignored. A gang of Madras born Telugu-speaking coolies cannot be shown as Ahirs, even though the word into which the enumerator has metamorphosed the caste name they have given is a nearer approach to Ahir than to any other word. Thus the choice is more or less restricted, and, even when the requirements of locality have been satisfied, it is as often as not doubtful which of two names that are somewhat similar is the correct one. The

following are some instances taken at random from the schedules. They refer in practically every case to Madrasi coolies and labourers:—

Pule.	Paliya.	Paliyachi.
Pali.	Padiya.	Pariyachi.

It seems at first sight an easy enough matter to assign these to their proper castes. When, however, it actually comes to allocating the entries, the matter is not so simple as it would at first sight appear. Pule may be either Pillai or Palli; in all probability the former, which is not a caste name. Pali strikes the abstractor as being obviously Palli till it commences to figure on several pages side by side with Paliya and Padiya, when it begins to dawn upon him that Paliya and Padiya are nothing more or less than Paria ("l" and "y"—which is "r" in Arakanese—being interchangeable) and that it is possible that Pali is only Paliya heard wrong or carelessly written down. He makes his choice, treats Paliyas and Padiyas as Parias, and possibly all goes smoothly till he comes upon a "Paliyachi" wedged in among a number of Paliyas. This gives him pause, and when, later on, he comes upon a column of Paliyachis and Pariyachis he is forced to the conclusion that at some stage or other the Pallis or Parias have been converted into Padiyachis. Difficulties like the above can be multiplied indefinitely.

I may seem to have dwelt at somewhat undue length on this aspect of the caste returns in Burma. No one, it may be said, is likely to place any great reliance on the caste figures collected in Burma. That this has been the case in the past is, no doubt, true. I submit, however, that since the 1891 Census the body of caste folk in the province has increased so largely and has now reached so substantial a figure, that, unless some disclaimer such as the above is made, the public may be moved to think that the familiarity with and knowledge of caste has grown to an extent proportionate to the growth of the Hindu population, and to treat the data with the same respect as that with which they treat the returns compiled for castes in their locality of origin. With the assurance that if they do so they are doomed to disappointment, I pass on to the consideration of the castes that are found in Burma.

No real castes in Burma.

158. They are, of course, all non-indigenous. The Yabeins, the Ponnas and the pagoda slaves referred to in paragraph 226 of Mr. Eales' Report are survivals of what must have been in bygone days a near approach to "functional" castes, but the Burmese nature is so essentially democratic and regardless of social distinctions, that the Indian caste system has never been able to gain a foothold here. It is ture that in his report on the operations during the season 1893—97, the Settlement Officer, Minbu, has referred to a class known as the *Thugaungs*, the landed proprietors of the Salin subdivision, who intermarry among themselves, live in groups of families in superior houses, and have gradually come to consider themselves and to be looked upon by the people as a separate class; but though the creation of this rural aristocracy is interesting in so far as it illustrates a tendency that has hitherto been looked upon as wholly foreign to the character of the Burman, these very select landlords cannot be said to exhibit the really essential features of a caste. There appear to have been at one time among the Chins 36 professional clans whose occupations were hereditary. The Pazan Lo was the priestly clan, and there were goldsmith and cutlar clans. These have, however, all disappeared by now, and it is doubtful whether at any time they really resembled castes.

Indian castes.

159. The Indian castes have been described so fully elsewhere, that at first sight it would appear superfluous to treat of them in detail. Numerically, however, the strangers within our gates have become so important an element of the population, that I hardly think that a description of a few of the castes most strongly represented in the province would be out of place. For the following particulars I am indebted for the most part to the interesting and scholarly account of castes contained in the 1891 Madras Census Report by Mr. Stuart.

Paraiyan.

160. The Paraiyan or Pariah caste is numerically one of the strongest of the castes of Madras. In 1891 there were in the presidency over two million Paraiyans. In Burma there

were in 1891 a total of 20,453. This total had risen in 1901 to 25,601. It is the most numerous Indian caste in Burma. The majority of the Madrasi domestic servants employed in the province are recruited from it. The Paraiyans are a Tamil-speaking caste. Mr. Stuart says of them—

"The Paraiyans have been but little affected by Brahmanical doctrines and customs, though in respect to ceremonies they have not escaped their influence. Paraiyans are nominally Saivites, but in reality they are Demon-worshippers. The Valluvas are their priests. The marriage of girls before puberty is very rare, divorce is easy; a husband can send away his wife at will, and she, on her part, can dissolve the marriage tie by simply returning the *tali*. In such cases the husband takes the children or contributes for their maintenance. Widow marriage is freely allowed. I have found no traces of polyandry among this caste."

Originally the Paraiyans were field labourers and weavers. The caste is very low in the social scale, but, despite the idea of degradation that has come to be attached to the term "Pariah," there seems to be no reason for looking upon it as on the same level with the professional sweeper castes. A very large proportion of the Native Christians of India are Paraiyans.

Mala.

161. The Mala is the Telugu Paraiyan caste. The majority of the Malas in Burma are coolies. There were altogether 18,522 in the province on the 1st March 1901. It is not clear from the figures how many there were in 1891. They appear to have been shown under some other head in that year. The following particulars regarding them are taken from the Madras Census Report for 1891 :—

"Malas, like the Paraiyans, are said to have been weavers at one time, but very few are engaged in this occupation at the present day. Most of them are now labourers. Like the Telugu people generally, the majority of the Malas are nominally Vaishnavites, but their real allegiance is given to the demons and village deities. They have priests of their own called Mála Dàsaris. There is no rule prescribing early marriage, but the statistics show that marriage before puberty is common. Divorce is free. * * * Malas eat flesh, including beef, and have no caste restrictions regarding the consumption of liquor."

Kapu or Reddi.

162. The Kapus were in 1891 the largest caste in the Madras Presidency, and numbered nearly two million and a half members. A total of 2,826 Kapus and 1,069 Reddis figure in the Burma Census returns for that year. At the recent Census the totals were 11,214 and 3,396

"The Kapus or Reddis" says Mr. Stuart, "appear to have been a powerful Dravidian tribe in the early centuries of the Christian era * * *. The number of subdivisions is 840 * * *. Each subdivision is divided into a number of *tegas*, and marriage can take place only between members of the same *tega*. There is no universal rule as to the age at which girls should be married * * *. The remarriage of widows is not generally allowed."

Their marriage ceremonies appear to be peculiar. Among other noticeable features are "the worship of a number of pots specially made for the purpose and filled with water in the feigned anger of the bridegroom's party on the fourth day of the ceremony."

Palli.

163. Mr. Stuart says of the Pallis—

"The Pallis, Vanniyans or Padaiyachis are found in all the Tamil districts. * * * Vanniyan is derived from the Sanskrit *Vahni*, fire and the Pallis claim to belong to the *Agnikulam* or Fire Race. * * * Padaiyachi means a soldier. * * * After the fall of the Pallava dynasty the Pallis became agricultural servants under the Vellalas, and it is only since the advent of British rule that they have begun to assert their claims to a higher position.

A total of 13,250 persons were returned as Pallis in Burma at the recent Census, while the Vanniyans and the Padaiyachis numbered 1,008 and 5,817 respectively.

164. The following are the totals for some of the remaining caste of importance:—

Brahman	...	15,922	Bania	...	3,393
Chetti	...	6,508	Chatri	...	13,454
		Kayasth ... 3,368			

A total of 41,663 males and 7,758 females were shown as Sudras. It is prboable that the bulk of these belonged properly to the Madras castes cited above.

Musalman tribes.

165. The principal Musalman tribes represented in the province are the Shaikhs, the Saiyyads, the Mughals and the Pathans. The Zairbadis and the Choliars have also been treated

for the purposes of this chapter as tribes. The last named have been fully described by the Right Rev. Dr. Strachan in a note printed in the 1891 Census Report. They numbered in all 2,956 at the Census of 1901. The most numerous tribe is that of the Shaikhs. The total of 269,042 represents 80 per cent. of the Musalman population of Burma. The Saiyyads and Pathans are far behind, with aggregates of 8,970 and 9,224. "Zairbadi" is the name ordinarily given in the province to the offspring of a Muhammadan native of India by a Burmese wife. It is not, however, always employed in this its narrowest sense. The Burmans have various terms for the Zairbadi; among others "Pathi" and "Myedu Kala" may be mentioned. The Zairbadi of Lower Burma is as often as not a Chittagonian-Burmese hybrid. The issue of a union of this nature is not altogether satisfactory. The Zairbadis of the coast ports are not to be numbered among the most respectable of the inhabitants of the province. In Upper Burma the Musalman strain is at times of greater antiquity; the component parts have had time to assimilate gradually, and the product is generally more of a success than in the south. The following note on the Zairbadis of the Mandalay district is a contribution by Mr. E. P. Cloney, Subdivisional Officer of Amarapura :—

"*Zairbadis.*—This is a name which is supposed to be derived from ဇေရ (Pali for middle or centre—Burmese အလယ်) and ဘာဒိ (Pali for ဖြစ်သည်, to be). The whole word is အဆယ်ဖြစ်သည် meaning neither of the father's or mother's race.

"Aother meaning is given, *Zer*..... below or lower, *abadi* ..... flourished. "Having come up from below (or the Lower Province) have taken root and flourished here (Upper Province)."

"This name is the same as *Bandat* or *Kabya*, but while *Bandat* and *Kabya* are applied to the issue of all other races that have intermarried with Burmese, the term *Zairbadi* is applied Burmo-Musalmans only.

"There are supposed to be three classes of *Zairbadi* in this subdivision—

(1) The issue of Muhammadan immigrants from Northern India.
(2) Muhammadan prisoners fetched from Arakan.
(3) Muhammadan prisoners brought by the victorious Burmese army from Manipur.

"(1) It would appear that a body of about 3,700 Muhammadans from Northern India came during the reign of King Alaungpra and offered their services, which were accepted; but as the king feared to keep so large a body of foreigners together, he gave them lands in the north of Shwebo (Myedu, Tantabin subdivision), Yamèthin and Yindaw.

"These immigrants were required to render services for the lands granted to them by placing 10 per cent. of the males at the capital as *The-nat-ahmudan* (musketeers).

"The contingent left on guard had to be supported by their respective villages with food, clothes, &c.

"(2) The Muhammadan prisoners fetched from Arakan were simlarly separated and allowed lands to support themselves with, on conditions similar to those of the immigrants.

"These Arakan Muhammadans were not musketeers, but the contingent they supplied had to do any kind of work assigned to them by the ministers and officers of the palace.

"It was only after King Mindôn had rebelled against, and ousted his brother Pagan Min, that the Arakan Muhammadan prisoners' descendants got the title of "amyauk" (gunners).

"The two flourishing villages of Bôn-o and Taungmyin are the principal villages in this subdivision where the Arakan Muhammadan prisoners' descendants are now found.

"(3) The Muhammadan prisoners' from Manipur were also separated and allowed to settle in the following villages :—

(1) Kyimyindaing,
(2) Manawyaman,
(3) Achôk,
(4) Sagyinwa,
(5) Odaw, and
(6) Paleik.

"These prisoners and their descendants rendered services for their lands as tailors and weavers only, and got the title "*achôk.*"

"The *Zairbadis* as a rule are law-abiding. They, on the whole, are a flourishing and well-to-do community with too many interests at stake to be disloyal. They are, however, litigious and fanatical, but not so bad as their co-religionists of India proper.

"While sticking faithfully to their religion and following its precepts, the *Zairbadi* has adopted the dress of the Burman. Most of the *Zairbadis* know Burmese only, but some are acquainted with Hindustani and Arabic as well as Burmese. Some of the captives were sent to Möng Nai (Monè); the rest were allowed to settle at Ava, Amarapura, in the southern parts of the Kyauksè districts, and at Mogôk. At first the captives supported themselves by daily labour of all kinds. Gradually their children and grandchildren learnt

weaving, spinning, &c., and they now support themselves mostly by silk spinning, weaving, &c. Some are cultivators."

Methods of studying the people.

166. Let us now turn from the castes and tribes to the races inhabiting Burma, and specially to the indigenous races, whose heritage the country is, of whom, if we are to administer them aright, we cannot have too full, intimate and particular a knowledge. We have been told that the proper study of mankind is man. It would need a greater than Pope to condense into an epigram the proper methods of that study, but it is obvious that for our purposes they may be divided roughly into the scientific and the non-scientific. With the latter we have, of course, here no concern. With the former we have. The following extract from Professor Sergi's *Mediterranean Race* (Edition 1901) gives as comprehensive an epitome as I have yet seen of the standpoints from which the human race may be regarded by the man of science:—

"It may first, however, be well to refer to a recent dogmatic attempt to solve this problem, which shows how necessary it is that all the scientific methods—ethnographical, archæological, anthropological, linguistic as well as geographical—should converge in the solution of the problem of the origin and diffusion of Mediterranean civilization."

This is not epigrammatic, but the list it gives may be said to be fairly exhaustive, and nothing could exceed the truth of the proposition it enunciates. It only remains to substitute for the last two words the words "the peoples of Burma" to adapt the text to our present requirements.

Application of the scientific methods.

167. I do not think that I am far wrong in saying that, of the scientific methods enumerated above, only the first and the two last have hitherto been brought to bear with anything approaching thoroughness on the study of the peoples of the province. Certain it is that, till all have been applied, our knowledge of these peoples must of necessity be defective. To the linguists must be given the credit of having been longest in the field. For the last half century scholars have been busy examining the vernaculars of Burma and establishing affinities. The Linguistic Survey is now almost completed, and, despite the assertion that its operations do not extend to Burma, I can with gratitude record that it has thrown a good deal of light into some of the dark corners of the province. How important a part language plays in Burma in the classification of the people, may be learnt from Sir George Scott's instructive *Gazetteer of Upper Burma*. His ethnology chapter is nothing more nor less than a marshalling of tongues. If the speech of a particular community cannot be assigned to a particular group, that community is, *ipso facto*, isolated, whatever similarity its customs, dress and physical traits may have with the customs, dress and physical traits of any other community, neighbouring or otherwise. It is not that ethnography has been neglected in Sir George Scott's publication. The first volume of the first part of the *Gazetteer* is a veritable store-house of facts relating to indigenous usages, dress and the like, but in the end practically everything in the way of classification hinges on vocabularies. To the student of the peoples of India the importance attached to the language test may seem unjustified: to the resident of Burma nothing is more natural. Where caste is unknown and religion indicates but little, it is the most obvious and surest criterion of difference. As regards the remaining scientific methods, it may be noted that good and useful archæological work has been done in the province, but that, as scarcely anything in the shape of prehistoric human remains have as yet been recovered, it has been directed for the most part to the deciphering of old inscriptions and the examination of ancient buildings. History too, and, where necessary, geography, have in their turn been duly laid under tribute, but they do not carry us very far. It is the realm of an anthropology that still remains to be explored in Burma. It is hoped that due honour will very shortly be given to this neglected branch. At the instance of the British Association for the advancement of Science, the Government of India have ordered an ethnographic survey, which will include not only ethnography proper, that is to say, the systematic description of the history, literature, traditions and religious and social usages of the various races, tribes and castes in India, but also anthropometry, or measurements directed to determining the physical types characteristic of particular groups. Under the latter head it is possible that exceed-

ingly interesting results may be obtained in Burma. As I have already mentioned, we have in our Gazetteers a mine of valuable facts regarding usages and customs. It is true that there is a mass of information still to be recorded, but the nucleus is there. On the other hand, our anthropometrical data are so far practically *nil*. The science of anthropometry has been applied hitherto to the least reputable of His Majesty's subjects in the province, and in their case for the furtherance of ends not "scientific and minor." The next few years will, it is hoped, see it raised out of the atmosphere of the police court into more dignified surroundings.

I have ventured on these few remarks in order to show why in this report no attempt has been made to undertake a classification of the races of the province similar to that which I have essayed in the case of its languages. Original research is outside the sphere of a Census Superintendent's labours. He can merely indicate as best he can the net result of the toil of those who have borne the burden and heat of the decade under review. In the language chapter I have been able to show in a connected, and, I hope systematic, form the conclusions to which the labours of these "actual workers" seem at present to point. As regards race, though the data are largely there, the scientific method has not yet been applied, and, while I hope that my successor in 1911 will have materials for a detailed, if not final, ethnographical grouping, I must content myself with a bald enumeration of the tribes and races of Burma.

The Burmans.

168. Concerning the past of the Burmese race the future has still much to tell us. Philology has already breathed a certain amount of the life into the dry bones. The affinities of the Burmese with the Himalayan languages are unmistakeable, and, though the evidence on the point is almost wholly linguistic, the theory that the Tibetan and the Burmese races have a common origin has now obtained universal acceptance. The theory till recently held has been that Tibet was the early habitat of the Burman's forefathers. From a note on the Indo-Chinese language family which I have received from Dr. Grierson, however, I learn that the more correct view is that put forward by Professor E. Kuhn of Munich in his *Ueber die Herkunft und Sprache der transgangetischen Völker*, namely, that Western China, between the upper courses of the Yang-tse-kiang and the Hoang-ho, was the original home of the Indo-Chinese race, and that this region and not Tibet was the starting point of the Burman's migrations. According to Professor Kuhn's theory the Tibeto-Burman race moved westwards from this starting point at a comparatively recent era towards the headwaters of the Irrawaddy and the Chindwin, and there divided up into separate branches, some of which maintained their westerly course, to find an ultimate resting-place in Tibet and portions of Assam, while the others either worked southwards into what is now Burma or remained to people the country in the neighbourhood of this parting of the ways. The Burmans were one of the branches which made for the southern plains. This variation of the earlier theory is, so far as I am aware, not inconsistent with the facts on which that theory rested, though it is possible that it may not find favour with those who have hitherto argued on the assumption that the Tibetan plateau was the fountain head of the second of the prehistoric streams that swept down over the face of the land from the north. In any case, from whatever source it proceeded, we shall be safe in laying down that the Burmese race came in the first instance into the country from the north, and that its general movement has been towards the south. With this much we may rest content, solacing ourselves with the reflection that, as ethnologists in Europe have so far failed to achieve unanimity in their findings concerning the origin of races as near home and with as notable an ancestry as the peoples of the Mediterranean, it will be no great reproach if some of the Tibeto-Burman race problems remain finally unsolved for some time to come.

Dr. Macnamara's theory.

169. It may not be out of place, while touching on the question of the Burman race problem, to refer to a rather novel theory recently advanced by Dr. Macnamara in his *Origin and Character of the British People*. In this work, published in 1900, the writer has been at pains to establish an ethnical connection between the Burmese and the Irish.

"In the province of Ulster," he says, "and in the city of Dublin and its neighbourhood, a considerable number of the inhabitants are descended from either English or Scotch ancestors, but the remainder of Ireland is populated by an Iberio-Mongolian people * * * the presence of the Celtic Aryan in Ireland has not materially altered the racial character of a large proportion of its inhabitants. In the north-west of Ireland the descendants of the Northern Mongolian stock are in evidence, and throughout the west and south the prehistoric Southern Mongoloid type is unmistakable, although they have intermarried largely with the aboriginal Iberian population. These mixed people form the lazy, rollicking merry Irishman of the caricaturist. * * *. As before stated, the Burmese have been described by an Irishman who knew them well as 'the Irish of the East,' and we seem to comprehend the reason why this should be the case, for we conceive that these people were in far distant ages, to a large extent, derived from the same Mongolian stock."

The Mongolian element in Ireland and elsewhere Dr. Macnamara accounts for by the presence in Europe during the bronze age of itinerant bronze workers and sellers from South-Eastern Asia, who, moving gradually westwards, encouraged by the discovery of alluvial deposits of tin in England, Ireland and on parts of the continent itself, settled down in these western seats where they found they could ply their trade profitably, and eventually formed an integral portion of the population of occidental Europe.

As to the presence of a Mongoloid element in Ireland, I have nothing to say. Assuming that its existence is assured, I have no criticism to offer on the suggestions that it was introduced in prehistoric times by Mongolian bronze workers, or that those bronze workers came from South-Eastern Asia. (Professor Sergi holds, in fact, that though bronze was introduced from Asia, it was by a non-Aryan race.) All I would here remark is that the alleged resemblance in character between the Irish and Burmese cannot be looked upon as affording any support whatever to Dr. Macnamara's theory. His prehistoric Mongolians were to a large extent first attracted into South-Eastern Asia by the tin deposits of Burma, Siam, Indo-China and the Malay Peninsula. This tin area was the starting point of the migrations that extended to the British Isles. According to his own showing these migrations took place during the bronze age. Now it is practically certain that the Burmans did not arrive in Burma till after they had acquired a knowledge of iron, *i.e.*, not till a good deal later than the bronze age; therefore, these Mongolian bronze workers cannot have been Burmans, nor, unless the expression is given an exceedingly elastic meaning, can they have been derived from the same Mongolian stock. They may have been the prehistoric precursors of the Talaings or Mons, but, whatever they were, thay can have exhibited then but few of the features that are now regarded as typically Burmese. The mere fact of their winning their way across Asia and Europe to the ultimate inhospitable West to push their wares in the market, shows that they possessed determination, a spirit of enterprise and sound business capacity,—qualities that place them and the typical Burman wide as the poles asunder. The Burman, as we know him, is essentially a non-migratory, unbusiness-like, irresponsible creature, perfectly incapable of sustained effort, content with what can be gained by a minimum of toil. The fact that his free-and-easy, jovial disposition has been reproduced on the further side of St. George's Channel is the purest chance. It must have been centuries after the Mongolian connection (if any) with Ireland had been severed that the Burman descended into the plains and began, amid voluptuous, ease-giving surroundings, to assume his rôle of the "Irishman of the East."

Burmese characteristics.

170. Of the characteristics of the Burmese as a nation, it is needless for me to write in this place. To attempt to recapitulate the main features of their history would be merely to repeat a task which my predecessor performed with great thoroughness ten years ago. Abler pens than mine have portrayed the outward life and aspects of this fascinating and yet disappointing people. It is sufficient among the more recent publications to name Sir George Scott's *The Burman, his life and notions,* of which a new edition has recently appeared; Mr. Hall's (H. Fielding's) *Soul of a People,* and the sumptuously illustrated *Burma* of Mr. Ferrars and Mrs. Lewis to show that there is princely store of matter for the needs of all those who are anxious to know what there is to be known of the Burman as he is. The total of

Burmans at the 1901 Census was 6,508,682, of whom 3,191,469 were males and 3,317,213 were females.

The Arakanese.
The Tavoyans.
The Yabeins.
The Yaws.
The Chaungthas.
The Inthas.

171. Less than one hundred and twenty years ago there was a kingdom of Arakan, independent of that of Pagan, and the separation of the Burmese and Arakanese people dates back to before the beginnings of history. We have what is really very strong linguistic proof, however, of the fact that the Arakanese are a branch of the Burmese race, though how long it is since they were separated from the original stem is very doubtful. Apart from language, moreover, the character, features and physique of the two stocks proclaim a close ethnical affinity. Save for a few Indian usages assimilated from his Chittagonian neighbours and a trifle of Aryan ballast acquired from the same source, the Magh or Arakanese is, to all intents and purposes, a Burman, but a Burman, be it said, bereft of much of his charm. The Arakan division, which extends down the western flank of the province from the borders of Chittagong almost as far as Cape Negrais, is more or less conterminous with the ancient kingdom of Arakan, and is the home of the present day Arakanese. A total of 405,143 persons returned themselves as Arakanese in 1901. In 1891 the race numbered 354,319 representatives. The Tavoyans of the Tenasserim division profess to be the descendants of Arakanese who, from time to time left their native coasts and settled down in the south. The latest of these emigrations is said to have taken place during the reign of King Bodawpaya of Ava, *i.e.*, at the close of the eighteenth century. The speech of the Tavoyans, which is discussed elsewhere in the language chapter, would appear to entitle them to the descent they claim. The Tavoyans in the Tavoy district itself have for the most part returned themselves as Burmans. The total of Tavoyans returned as such at the Census was 948 only. The Yabeins, the erstwhile silk-worm breeders of the Hanthawaddy, Pegu and Tharrawaddy districts, are probably Burmans by race. Though the so-called Yabein dialect of Burmese has died out, there were at the 1901 Census 2,252 people who returned themselves as Yabeins, as compared with 2,197 at the preceding enumeration. The Chaungthas are a community inhabiting the district of Akyab and the Hill Tracts of Arakan, who speak a language which has been classed with Burmese. Further research may show whether the Chaungthas (who numbered 1,349), have more Burman or more Chin blood in their composition, and whether there is any truth in the legend that some of them are of Talaing descent. East of the Chaungthas, on the further side of the Arakan Yomas, is the Yaw valley, the home of the Yaws. If linguistic evidence is worth anything, the Yaws are of Burman lineage, for they talk what is practically Burmese and have little in common with their Chin neighbours. There were only 18 Yaws entered as such in the schedules. The majority appear to have given Burmese as their race to the enumerators. The ancestors of the Inthas, or lake dwellers, who reside in the vicinity of the Yawng Hwè lake in the Southern Shan States, appear to have come from Lower Burma. Tradition has it that Tavoy was their original home, but we have still to learn whether they were carried away thence as captives in the train of some conquering Shan general or whether they migrated north of their own free will. Their dress is no guide to their origin. Of their customs, the only two that single them out from their neighbours, appear to have been acquired since they came to their present seats. I refer to the practice they have of building their huts out in the water, at times at a very considerable distance from the shore of the lake, and to their curious habit of standing up when rowing and using their legs to assist them to propel their boats through the water. Their number in 1901 was 50,478.

The Talaings.

172. A total of 321,898 persons returned themselves as Talaings in 1901. So much has been written of the Talaings in the past, that it is needless for me to say more here than that they are the remnant of the Peguan race, which for long strove with the Burmans for the ascendancy in what is now Burma. It is difficult to realize now that less than a century and a half ago the Peguans, who now number about the total of a fair-sized district, were masters of the country from the Gulf of Martaban to far to the north of Mandalay and capable of putting an army of sixty thousand men into the

field. Such was, however, the case, and it is not too much to say that, but for the resolution and skill of an obscure shikari from the jungles of Shwebo, Burma might well have become the kingdom of the Mons and Talaing now the prevailing tongue in the country from the borders of Assam to the Malacca frontier. At present the confessedly Talaing population of the province is practically confined to the Tenasserim and Pegu divisions of Lower Burma.

The Talaings are, historically, the most important representatives in Burma of the Mon-Annam race. It is now recognized as highly probable that the ancestors of the Mon-Annams formed the first of the Indo-Chinese waves that swept over the south-eastern portion of the continent of Asia, displacing the even earlier aborigines, concerning whom little definite is known, but who, there is reason to believe, were related to the ancestors of the Munda race which subsequently peopled a considerable portion of Central India, and possibly of some of the tribes which are now found on the Australian continent. It is impossible now to do more than indicate generally what the regions inhabited by the Mon-Annam people were, but, judging from the extent of the area in which they have left unmistakeable deposits of their speech—an area stretching from the Khassia Hills in Assam, to beyond the Gulf of Siam—they must have been a populous and widespread nation. Here they are mainly interesting from a philological point of view, for, save in the case of the Talaings, it is outside Burma that one must look for anything in the shape of relics of their political greatness.

In regard to the origin of the word "Talaing" Mr. Eales remarks as follows in his 1891 report :—

"It was supposed that Talaing and Telingana were the same words, and on the ground of this coincidence of sound and of a supposed agreement of the roots of vocables with the roots of the aboriginal Kolarian language spoken by the Kols in India, it was supposed that the Talaings brought their language over from India. Captain Forbes and Dr. Forchhammer have disposed of this theory once for all. The refutation of the theory, however, lay in the name Talaing itself, which is never used by the Talaings to distinguish themselves. They always called themselves Mons. Talaing was a term of reproach forced upon them by the conquering Burmans."

The research of the past ten years has shown us more clearly than ever that the Peguans did not get their language from Central India, but apparently the second view referred to by Mr. Eales, namely, that "Talaing" is a corruption of "Telingana," has not yet finally been abandoned by scholars. I observe that Professor Keane still favours the theory. In his *Man Past and Present*, published in 1899, he says :—

"During the historic period a few Hinduized Dravidians, especially Telingas (Telugus) of the Coromandel coast have from time to time emigrated to Indo-China (Pegu), where the name survives amongst the "Talaings," that is, the Mons, by whom they were absorbed just as the Mons themselves are now being absorbed by the Burmese. Others of the same connection have gained a footing here and there in Malaysia, especially the Malacca coast lands, where they are called Klings, *i.e.*, Telings, Telingas."

The fact that the Mons did not use the word Talaing to distinguish themselves does not, it seems to me, prove much. It is not likely that the descendants of the original Dravidian immigrants (if such immigrants there were) were ever inordinately proud of their dark-skinned forbears, and it is highly probable that, as the process of absorption went on, the "first among men" were just as anxious to forget their foreign ancestry as their candid Burmese neighbours were desirous of keeping it constantly before their eyes. That the word "Talaing" was a term of reproach does not, it seems to me, detract from its historical value. At the same time there is no denying that much may be urged against the alleged derivation from Telinga. Mr. Eales contends—no doubt correctly—that the name "Kling" is simply a Chinese distortion of the word "Coringhi," so that the additional fraction of evidence from the Malacca coast must be held to be irrelevant. On the whole it seems to me that the last word in the matter has yet to be said.

The Chingpaw or Kachins.

173. From a numerical point of view the most important of the races inhabiting that portion of Upper Burma which lies north of 24° north latitude and east of longitude 96° is that

of the Chingpaw or Kachins. It is strongly represented south of this area also, but it is only above the parallel of latitude indicated that it forms the bulk of the population. Fifty years ago, we are told, the southern limit of the Kachins was a matter of two hundred miles further north than it is now. Since then the race has been drifting steadily southward, a vast aggregate of small independent clans united by no common Government, but all obeying a common impulse to move outwards from their original seats along the line of least resistance. Mr. Cholmeley, Deputy Commissioner of Bhamo, referring to the golden days of the Shan dominion, "when the towns, whose moats and walls one comes upon moulder-ing in the dense forests, each held its petty *Sawbwa* and its busy populace," writes as follows of the ever-encroaching Chingpaw:—

"At that time the warlike and destructive Kachin had not yet appeared on the scene, his advent only dating back some 230 years, and the peaceful Palaung still occupied the hills from which the gradual southward flow of the Kachin presently drove him forth. When we arrived on the scene the Palaung was making a last determined stand in the uplands in the *Kodaung* of Möng Mit, but the crest of the wave of Kachin immigration was rising very high behind the Shweli, and in no long time Möng Mit and the Ruby Mines must have fallen before his advance. As it is, the movement has been checked, and the result is that the southern part of the hilly portion of the district is badly congested."

Mr. Stirling in the Northern Shan States Census Report refers in the follow-ing words to the trend of the wanderings of the Chingpaw:—

"The southward movement of the Kachin tribes continues. Here and there they have been checked, but on the whole they spread a little farther each year. Kachin villages are found in South Hsenwi, in Tawngpeng and in the Möng Lōng sub-State of Hsipaw. They have settled on the fringe of the Wa country and in Mang Lŏn, and have begun to get a footing in Kēngtūng. * * * It is a serious matter for the Shan population. The more far-sighted recognize it as such and all keenly resent it. But the Shans have neither the numbers nor the fighting qualities to check the tide."

The most recent philological enquiries show that it is probable that the pro-genitors of the Kachins were the Indo-Chinese race who, before the beginnings of history, but after the Mon-Annam wave had covered Indo-China, forsook their home in Western China to pour over the region where Tibet, Assam, Burma and China converge, and that the Chingpaw were the residue left round the headwaters of the Irrawaddy and the Chindwin after those branches which were destined to become the Tibetans, the Nagas, the Burmans and the Kuki Chins had filtered away westwards and southwards. In these remote uplands they appear to have been content to remain till a comparatively recent date, when pressure from above, over-population or some obscure migratory instinct began to drive them slowly but surely southwards. In the north of the province they have been brought up by the opposing front of British domination, and the stream, instead of flowing down the hill ranges of Burma, has been diverted eastwards, and, skirting the edge of the province, shows signs of emptying itself down the other great waterways of Indo-China. Whatever the ultimate trend of their wanderings may be, the Kachins are now with us, on this side of, as well as upon and beyond, our marches, and will long be a force to be reckoned with by our frontier administrators, for they are a pugnacious, vindictive, stiff-necked generation, and, when beyond our administrative border, are still apt to be turbulent and unreasonable. Mr. George's monograph on the Kachins, published as an appendix to the 1891 Census Report, is still our main source of information regarding the customs and practices of this people. It forms a substantial portion of the article on the Kachin Hills and the Chingpaw in the *Upper Burma Gazetteer*. There were 64,405 Kachins enumerated at the Census. Had the inhabitants of the estimated areas of Upper Burma been shown on the schedules, this total would probably have been more than doubled.

The divisions of the Chingpaw are numerous and varied, and must be kept apart if confusion is to be avoided. The classification of the race into Khakhus and Chingpaws is, roughly speaking, geographical. The Khakhus are the up-river men, the Chingpaw the Southerners. There is a further political division into Kamsa, or chief-ruled, and Kumlao, or democratic Kachins, but neither the de-mocrats nor their *duwa*-ruled congeners are peculiar to either of the geographical areas. The most obvious Kachin units are the clan and the tribe. Of tribes there are five—the Marips, the Lahtawngs, the Lepais, the 'Nkhums and the Marans—

which can be traced by legend back to a single progenitor and are looked upon as parent tribes. They are distributed all over the Kachin country and are represented indiscriminately among the "headwater" Khakhus and the Chingpaw proper. The sub-tribes of these parent tribes are very numerous. *The Upper Burma Gazetteer* mentions fifteen subdivisions of the Marips, eighteen of the Lahtawngs, seventeen of the Lepais, eight of the 'Nkhums and four of the Marans. The Lepais are the most numerous and the most influential; at the same time they are, or at any rate have been, the most impatient of control. The Marips have been uniformly well disposed towards the British, and it is only their Sana subtribe that has spoilt the Lahtawngs' record for good behaviour. The 'Nkhums and the Marans are comparatively unimportant divisions of the race. For a description of the manners and customs of the Kachins, of the slavery that exists among them and finds a counterpart further south in the Chin Hills, of their marriage rites, their funeral ceremonies and their thick-headed, slow-moving system of vendetta, I would refer the enquiring reader to the pages of the *Upper Burma Gazetteer*. Mention must here be made of what Sir George Scott calls cognate tribes, with whom the Chingpaw consider themselves connected, but whose usages and speech seem to belie the relationship. The Sassans, the Marus, the Szis and the Lashis are the most important of these tribes. The Sassans bear many outward and visible signs of a connection with the Chingpaw. If it were not that they speak a dialect of their own, there would probably be no hesitation in classing them as Kachins. It is very possible that they are a connecting link with the Naga tribes. Their habitat lies to the north and west of the Amber mines and extends into Assam. Outwardly the Maru is like a Kachin, but Lieutenant Pottinger, who has had exceptional opportunities of studying them in their haunts, believes that the Marus, with the Szi-Lepais and the Lashis, belonged originally to a separate stock that at a comparatively recent epoch amalgamated with the pure Kachin. To my mind there is a great deal in this theory. In the light of the most recent pronouncements of linguistic experts, I venture to think that the three tribes were portions of a branch thrown off from the young parent stem after the early ancestors of the Burmans had descended some distance southwards from the headwaters of the Irrawaddy and had evolved the germs of a new language—in a word, that they, with the Lisaws, the Muhsös, and possibly the Maingthas, the Akhas and the Lolos bear much the same relation to the Burmans in the east as the Kuki Chins, who are admittedly an offshoot of the last prehistoric inhabitants of the Upper Basin of the Irrawaddy, bear to that race in the west. The influence of China has done much to alter the characteristics of these people and to veil their real affinities, but the evidence of tongues is too persistent and uniform to be overlooked or ignored. The close linguistic connection between the Szi, the Lashi and the Maru is adverted to in the language chapter. There were 31 Sassans, 149 Marus, 317 Szis and 40 Lashis outside the "estimated" areas on the 1st March 1901.

Connected tribes.

174. For want of a better classification Sir George Scott has dealt in the Kachin chapter of his *Gazetteer* with the Khangs, the Kaphawks, the Kaluns, the Tarengs, or Maingthas, the Khenungs, the Khunnongs, the Murus, the Sons and the Bilus, whom the Kachins regard as being "indirectly connected with them." These are for the most part mere names to the ethnologist. With the exception of the Tarengs little is known of them: they are peoples whose seats, eastwards towards the Salween, have been but rarely if ever visited by Europeans. The Khunnongs have been identified with the Mishmis, who have been so thoroughly described in Dalton's *Ethnography of Bengal*. They are very fair iron workers. In this respect they resemble the Tarengs, who, under the style of Maingthas, have acquired a reputation as hawkers and coolies throughout the far north of the province. These Maingthas are an interesting race, possibly more Chinese-Shan than Kachin, with a character that combines the restlessness of the primitive nomad with the business instinct of the latter-day Celestial. If Dr. Macnamara's Mongolian bronze-sellers came to Cornwall from anywhere within the limits of what now is Burma, it is among the Tarengs and their like that we must look for a survival of that spirit of enterprise that carried these wanderers

The Maingthas.

of old across the better part of two continents to the far off Isles of Britain. The home of the Maingthas lies for the most part outside the limits of Burma near Hkamti-Lông, but they come southwards in large numbers during the cold weather. There were 749 in Burma within the Census area on the 1st March 1901. In 1891 there were 1,393 only, 26 of whom were females.

The Shans.

175. It is not often that the search for the ancestral home of a widely diffused race finds its consummation in so minutely precise a statement as that made by Professor Terrien de La Couperie in regard to the origin of the Shans or Tai. A nation is by no means easily tracked to its primæval fountain-head even under the most favourable circumstances, so that when we find it stated in set terms in the introduction to Mr. Colquhoun's *Amongst the Shans* "that the cradle of the Shan race was in the Kiulung mountains north of Sz-ch'wan and south of Shensi in China proper," we may well agree with Sir George Scott in thinking it conceivable that posterity may some day be led to modify the Professor's judgment. In fact we are in 1902 practically where we were ten years ago in respect of our acquaintance with the early beginnings of the Tai. The greater part of what we know is what Dr. Cushing has already told us, namely, that South-Western China was the original home of the Shan people, or, rather, was the region where they attained to a marked separate development as a people; that it is probable that their first habitat in Burma proper was the Shweli valley, and that from this centre they radiated at a comparatively recent date northwards, westwards and south-eastwards through the Shan States and across Upper Burma into Assam. We have learnt little in the interval save that the classification of the Tai races is a task of far greater magnitude than appeared when the last census was taken. The opening paragraphs of Chapter VI of Volume I of the first part of the *Upper Burma Gazetteer* will give the reader a graphic idea of the difficulties that stand in the way of a comprehensive view of the past and present of the Shan people, of the perplexing variety of names under which the Tai have been and are still known throughout the far East, and of the misleading character of certain salient points in their history as handed down to the present generation. No doubt, when all obstacles have been overcome, it will be found that the Tai race boasts of representatives across the whole breadth of Indo-China, from the Brahmaputra as far as the Gulfs of Siam and Tongking; that it numbers among its members not only the Shans proper, the Laos and the Siamese, but also the Muongs of French Indo-China, the Hakas of Southern China and the Li, the inhabitants of the interior of the far Eastern island of Hainan in the China seas. No exhaustive survey of the Tai will, however, be possible till the results of British and French research have been combined.

176. All that is necessary here is to consider that portion of the race that has come within the scope of the recent census operations. The late Mr. Pilcher divided the Tai into the North-western, the North-eastern, the Eastern and the Southern, and Sir George Scott has, with a few minor qualifications, adopted this division. The Siamese and the Laos are the principal representatives of the Southern division. Siamese are found in considerable numbers in the districts of Amherst, Tavoy and Mergui in the Tenasserim division. The total at the time of the census was 31,890, while that of the Laos was 1,047. The habitat of the Eastern Shans lies between the Rangoon-Mandalay Railway and the Mèkong, and is bounded roughly on the north and south by the 22nd and 20th parallels of latitude. It includes the Southern Shan States, and comprises the country of the Lü and the Hkün of the States of Kēngtūng and Kēnghūng. Linguistically the connection between the latter two races and the Laos is very close, but apparently the racial affinity is not sufficiently near to justify the classification of the Hkün and the Lü with the Southern Tai. The North-Western Shan region is the area extending from Bhamo to Assam between the 23rd and 28th parallels of latitude. It corresponds more or less with those portions of the Katha, Myitkyina, Bhamo and Upper Chindwin districts which at one time or the other during the palmy days of the Shan dominion acknowledged the suzerainty of the *Sawbwa* of Mogaung. Of the many minor States that went to make up this dominant principality, only two, Thaungthut and Zingalein-Hkamti, have retained any relic of their former autonomy. The racial difference between this people to the west of the Irrawaddy

and the Shans of the east is marked by divergencies of dress and dialect. The North-Western Shans talk what Dr. Grierson has called Northern Burmese Shan, a tongue closely related to Khamti Shan. It extends, with minor variations, into Assam, and is represented in its purest and most archaic form in the now obsolete Ahom of that province. In the fashion of their clothing the North-Western Shans have assimilated themselves to the Burmans, in the midst of whom they live. Mr. Pilcher's North-Eastern Shans are the Chinese-Shans, or, as they are called by the Burmans, the *Shan-Tayôks*, who are found where Upper Burma and the Northern Shan States border on China. Sir George Scott is of opinion that with the *Shan-Tayôks* should be classified for ethnological purposes the Shans of the Northern Shan States, whose dialect differs more from that of the Southern Shan States than it does from the tongue of the Chinese-Shans. These latter, we learn, have very little that is Chinese in their composition. We are not, of course, here concerned with linguistic considerations, but Sir George Scott looks to more than dialectic differences. Though the turban worn by the Chinese-Shan females is peculiar to the *Shan-Tayôks* proper, the divergences in dress between the Hsenwi and the Chinese Shan are not radical. But it is mainly on historical grounds that the compiler of the *Upper Burma Gazetteer* has decided to classify the Northern Shan States Tai with the *Shan-Tayôks*. It remains to be seen whether anthropometry confirms this view.

The origin of the word Shan is a point which has not yet been finally settled. Sir George Scott says:—

"Whence the name Shan came is an unsolved riddle. We have seen that the Burmese almost certainly first knew the Tai as Tarôks or Tarets. It is possible that when afterwards they heard of the 'Han Yên,' the Chinese name for themselves, they transferred 'Han' into Shan and made a further ethnological error. * * * The name Siam is no help, for whether it is a barbarous Anglicism derived from the Portuguese or Italian word *Sciam*, or is derived from the Malay *Sayam*, which means brown, it can hardly be said to be a national word."

The Karens.

177. The last decade has seen a very marked decline in the cult of the Karen. In the early eighties the Karen, after a number of years of neglect, began to bulk large amid the non-Burmese elements of the population of the province and attracted perhaps a trifle more than his fair share of attention. At that time comparatively little was known of the Shan, the Northern Chin and the Kachin; the Talaing had lost much of his identity and was to the ordinary observer barely distinguishable from his Burman neighbour. The wild tribes of the Arakan Yomas were only to be studied in their own remote mountain fastnesses. The Karen, on the other hand, was to the fore, not less along the Eastern frontier than in the delta of the Irrawaddy. His dress, his form of speech, his manners and customs, and his extraordinarily receptive attitude towards the truths of Christianity singled him out as an accessible and profitable field for the labours alike of the ethnologist and the minister of religion, while his undoubted loyalty and his prowess as a fighter drew the official eye upon him. The missionaries have retained their hold on the Karen with unflagging zeal, but the interest of the student of manners and customs has shifted gradually northwards into fresh realms of research. Thus it is that, whereas prior to 1887 Messrs. Mason and Smeaton and Colonels MacMahon and Spearman had all written freely on the subject of the Karens, almost the only important contribution to our knowledge of the people that has been vouchsafed since then is that which Sir George Scott summarizes in that portion of the ethnology chapter of the *Upper Burma Gazetteer* which relates to the Karens of Karenni and Upper Burma. Dr. Grierson has, on linguistic grounds, placed the speech of the Karens in the Chinese-Siamese sub-family, and, though it appears to me doubtful whether Dr. Mason is justified in identifying the river of running sand which the primæval ancestors of the race are said to have crossed with the sand drifts of the desert of Gobi in Central Asia, there can be no doubt that the original home of the Karens must have been, if not in, at any rate in close proximity to, China. More than this it seems impossible to say. The Karens stand ethnically isolated in the midst of representatives of the three great Indo-Chinese immigration waves, and no increase to our knowledge of the Môn-Annam, the Tibeto-Burman and the Tai races serves to help us in the solution of the problem of their origin.

I have elsewhere described the Karen country as lying along the whole eastern frontier of Lower Burma from Mergui to Toungoo, in portions of the delta of the Irrawaddy, in the south-west corner of the Southern Shan States, and in the feudatory States of Karenni. Its general position is indicated in the map which is appended to this chapter. The three main divisions of the Karens—the Sgau, the Pwo and the Bghai—are by this time well known. The well-defined linguistic differences that separate them one from the other do not here concern us; what is more important ethnographically is the fact that, as Mr. Smeaton tells us, "although "there is perfect cordiality and fredom of intercourse between them, intermar- "riage is not frequent." This shows that there is no immediate prospect of the distinction becoming obliterated. The two first divisions are confined for the most part to Lower Burma. The Bghai preponderate in Karenni and the Upper Province. Several of the members of the Pwo and Sgau tribes mentioned in the *British Burma Gazetteer* should no doubt properly be classed under the Bghai. The Taroo and Gaikho clans, for instance, placed by Colonel Spearman among the Pwo, appear to be the Padaungs and Zayeins of the *Upper Burma Gazetteer*, who geographically, at any rate, should be included among the Bghai Karens. There are various sub-dialects of the Pwo and Sgau, but, so far as is at present known, the variations are not important, and, apart from these differences of speech (which Mr. Eales tells us are no more marked than are those which exist between the different county dialects in England), the only distinction between one clan and another seems to be in the dress worn: here a white blouse without stripes but with a narrow border of embroidery at the bottom, which varies from village to village; there a white blouse with red perpendicular lines; elsewhere white trousers with radiating red lines and the like, a method of discrimination that has led Sir George Scott to compare the list of clans to a "history of tartans." At some later date it may be possible to deal as fully and systematically with the Pwo and Sgau Karens as the compiler of the *Upper Burma Gazetteer* has dealt with the Bghai, though the task will be a difficult one, inasmuch as the introduction of Christianity has had a tendency to sweep away the more minute ethnographical distinctions. Till then we must be content to ignore the minor tribal subdivisions of the Lower Burma Karens and recognize only the two main ethnical divisions, the Sgau and the Pwo. At the Census the enumerators dealt with 86,434 admittedly Sgau and 174,070 admittedly Pwo Karens, 457,355 others being returned as "Karen" with the tribe unspecified.

Bghai and cognate tribes.

178. Under the head of the Karenni Sir George Scott has given us a description of the Karen tribes that live in or in close proximity to the Upper Province. These are the Red Karens proper, the Zayeins or Sawngtüng Karens, the Brès, the Padaungs and the Mepu or White Karens. These have all been classified as belonging to the Karen race, partly on account of dialectic affinities, partly on account of similarities in dress, usages and outward appearance, though it seems possible that the Padaungs ought ethnically to be affiliated with the members of the Mon-Annam race. Nearly all the main subdivisions present exceedingly interesting peculiarities. Space forbids me to do more than to refer to the ungraceful beaded garters of the Red Karen women which compel the wearers to walk with their legs wide apart, to the peculiar burial customs and coffins of the same people, to the teeth-staining ceremonies of the Brès, to the brass neck-rings of the Padaung women and to the modified form of tabu imposed upon the Padaung husband after his wife's confinement, to the customs prevailing among the Zayein males of shaving the whole of the head with the exception of a small patch over the ear, and to the extraordinary endogamous tendencies of some of the tribes, such as the Sawngtüng and the Banyang. For a full account of these interesting people the reader is recommended to turn to the *Upper Burma Gazetteer* (pages 523 to 554, Part I, Volume I). It appears from the report of Mr. Wooster, Assistant Political Officer, Karenni, that of late years the Red Karens, the Brès and Padaungs have suffered a diminution in numbers. The totals of the three races in the estimated areas of Karenni at the commencement of 1901 were as follows: Red Karens 24,043, Brès 3,500, Padaungs 1,867. Outside Karenni the Red Karens totalled 4,936 souls, the Padaungs 7,825, and the Zayeins 4,440.

The Chins.

179. That collection of hill tribes which is known generically as the Chin race inhabits the highlands to the west of Burma that run north and south from the 16th to the 26th degree of latitude, *i.e.*, from Cape Negrais to the mountains that form the western boundary of the Chindwin valley in the Upper Chindwin district. Though of enormous length their territory is nowhere of any considerable breadth, dwindling down in the Arakan Yoma region to quite a narrow strip of upland. It is on the whole very thinly populated. The Chins are closely related to the hill tribes of Eastern Bengal, and the conjecture that all are of Tibeto-Burman stock appears eminently reasonable. There seems every reason to believe that after the ancestors of the Burmans had passed from their earlier seats on the headwaters of the Irrawaddy into the extreme north of the province, and before any material change had come over their ancient form of speech, a portion of the race separated itself from the main body, penetrated down the valley of the Chindwin, took up its abode in the hills to the west of the river, and from thence spread southwards and westwards into Lushai land and what are now known as the Arakan Yomas. The descendants of the side swarm in Burma are the Chins. Mr. Taw Sein Ko is of opinion that some of the Chin customs in regard to slavery, inheritance, marriage and the like give a very fairly accurate picture of what the corresponding Burmans usages must have been in the far off past before Buddhism spread, humanizing and beneficent, over the country, and it seems probable that of all the non-Burman races that have found a home in the province they have the closest ethnical connection with the Burmese.

The Northern Chins.

180. Roughly speaking there are three main geographical divisions of the Chins: the Northern Chins, whose seats run more or less parallel with the Chindwin almost as far south as its confluence with the Irrawaddy; the Central Chins, who occupy the Northern Arakan Hill Tracts and the Pakôkku Chin Hills and are known under various names, such as Mros, Kamis, Chinbôns, Chinbôks and Chinmes; and the Southern Chins, the comparatively insignificant remnant who tail away towards the Irrawaddy delta. There seems to be no doubt that they were all originally of the same stock, but for some reason or other the Central Chins appear to have been more exposed to Lushai influences on the west and to Buman influences on the east than their brethren to the north and south, so that some of the Arakanese tribes appear of late to have been regarded hardly as Chins at all. In the rugged mountain chains inhabited by the different sections of the race language is no sound test of affinity, and it must be admitted that our knowledge of the Chins in the north-west of Lower Burma is by no means as clear as it should be. The greater part of the country of the Northern Chins falls within a clearly definied rectangular area, lying to the south of Manipur and between the Lushai Hills and the Chindwin river, which is known administratively as the Chin Hills and is the charge of a special Political Officer. It is true that people who are known as Chins and who bear no outward resemblance to the neighbouring Nagas of Assam are found scattered along the hills that fringe the right bank of the Chindwin far to the north of the Chin Hills proper, but little is known about them, and, compared with the residents of the politically administered area, they are numerically insignificant. Messrs. Carey and Tuck's *Chin Hills Gazetteer* contains an ample and detailed description of so much of the Chin race as the Political Officer's charge includes within its borders. To give the very briefest outline of the contents of the two interesting volumes would occupy more space than is at my disposal. A few, however, of the main points may be touched upon. The principal tribes into which the Northern Chins are divided are the Sôktè, the Siyin, the Tashôn, the Haka, the Klangklang, the Yokwa, the Thado, the Yo, the Nwitè and the Vaipè. The last four are now barely represented in the Chin Hills proper. The tribes consist of clans. Of these some of the best known are the Kanhow of the Sôktè tribe, the Yahow and Whenoh of the Tashon tribe, the Thettas and the Yokwas. A reference to the 36 professional clans into which the Chins are said to have once been divided has been made in an earlier portion of this chapter. The extent to which up to a recent date slavery flourished in the hills is remarkable. At one time the slave trade was an organized source of profit to a considerable

number of the Siyins and Sôktès. Any serfs that still exist are slaves in name only, for their civil rights are practically the same as those of their masters. In 1896 it was said that in a few years to come slavery, as we use the word, would be a thing of the past in the hills. The existence of slavery is a link connecting the Chin with the Kachins. The following notes regarding slavery and certain other matters, not touched upon in the *Chin Hills Gazetteer*, have been supplied by Mr. A. C. Bateman, Assistant Superintendent, Tiddim :—

1. "*Slaves.*—Nearly everything which is worth knowing about slaves, how they are acquired and their ownership, will be found in the *Chin Hills Gazetteer.*

"The following peculiar mannerisms, however, do not appear in the *Gazetteer* and may be of interest. It is not essential that a slave should live in his owner's house nor even in the same village. The slave may have three or four joint owners, and, so long as he fulfils his duty to his owner or owners, he may possess property.

"In the case of the slave having only one owner, he must give that owner the right hind leg of every animal shot in the chase or killed for the purpose of holding any feast. In the case of a slave having more than one owner his body and limbs are apportioned to each owner. Thus, the owner having the biggest claim on the slave, is apportioned the right arm, the next the left arm, a third the right leg, and so on, the head coming last in the scale of ownership.

"When this class of slave kills any animal he must give the right hand owner the right haunch, the left hand owner the left haunch, and so on, until all the owners receive their due. In such cases the slave is left possibly with the head, a few bones, and, with any luck, that highly prized Chin dish, the entrails.

"On a slave's death, the son takes his father's place. Should the slave have no son, his owner takes all his property. If there be a multiplicity of owners the property is divided among them on the right and left hand principle explained above. Should a slave fail to give his owner his due on killing an animal, the owner demands a whole animal of the sort killed. If there be a multiplicity of owners each one of them gets a whole animal of the sort killed.

"Should the slave refuse to settle this latter demand he is sold and all his property is confiscated to the owner or owners.

2. "*Religious customs.*—In most of the Siyin villages a kind of *Pôngyi* is told off permanently to officiate at all ceremonies. This person is known as a "Pasan," ဝတ်သူ by Burmans and as a "Pui Sham Pa" by Chins.

"The laws of inheritance are the same in his family as in that of any other Chin.

"The "Pui Sham Pa" holds his land and house, &c., on the "Pogalika (ပုဂ္ဂိဝ)" system of the Burman *Pôngyi.*

3. "*Borrowing and lending.*—In borrowing and lending money all bargains as to interest, &c., must be made prior to any transaction taking place. After money has once changed hands no interest may be claimed.

"In borrowing grain, &c., the person borrowing must pay as interest two baskets for every one borrowed. This interest may be claimed for a period of eight years. After eight years no interest may be claimed. A landlord may claim a nominal yearly tax from any tenant. The tax takes the form of from one to two baskets of the grain or pulse cultivated on the land.

4. "*Other customs,*—If while hunting a Chin wounds a tiger or other death-dealing wild animal, one may not ask any questions on the subject. It is very unlucky and one gives great offence to the spirit of the chase by either asking or answering any questions about a dangerous animal which has been wounded and not recovered. It is very useful to remember this while out shooting with Chins. Never ask a Chin for the skull of an animal he has shot.

"If on entering a Chin house and finding a woman 'at home,' one asks where her husband is, and gets the reply 'he is not here,' it is fatal to ask 'where is he.' 'He is not here' is intended to convey to the stranger that the husband is dead. One must never make a widow talk of her husband's death and *vice versâ.* If the husband be living and not at home, his wife will tell you her husband has gone to his fields, or on an errand, and so on. During the Census operations I made this mistake with disastrous results. Never ask a Chin to climb a tree on which any heads of animals are hung. The mere asking will cause the *nat* of that tree to visit his anger on the Chin in the shape of some illness, unless the *nat* is propitiated, which means that the Chin is put to the expense of giving a feast. Should a Chin climb the tree, there is no hope for him. He must die, unless he be a wealthy man and can afford to give a very big feast to the whole village.

5. "The Siyin fable about the origin of the various tribes and clans in the Hills is peculiar, in that it corresponds to our fable of the Tower of Babel.

"The Siyin fables runs: Many centuries ago all the Chins lived in one large village, somewhere south of Haka. They all spoke the same language and had the same customs. One day, at a big council, it was decided that the moon should be captured and made to shine permanently. By this means a great deal of unnecessary expense and bother would be saved in lighting. In consequence the construction of a high house (tower) was begun which should reach up to the moon. After years of labour the house had got so high that it meant many days of hard marching for the people working on the top to come down to the village to get provisions. It was therefore decided that as stage upon stage was built it should be inhabited, food, &c., being passed up from stage to stage, from below. In this way the people inhabiting the different stages gradually got out of touch with one another. From the very little intercourse the Chins of each stage had with one another, they acquired different manners, languages and customs. In the end when the structure had all but been completed, the *nat* in the moon was so enraged at the daring of the Chins, that he visited them with a fearful storm of rain, wind, thunder and lightning. During this storm the tower collapsed. It fell from south to north. The people inhabiting the different stages were consequently strewn over the land and built villages where they fell. Hence the different tribes and clans varying in customs and manners. The stones and building materials which formed this huge tower now form the Chin Hills."

The Central and Southern Chins.

181. The Pakôkku Chin Hills tract was treated as an "estimated" area and particulars regarding the strength of the different tribes and races of such of the Central Chins as reside within its limits are not procurable. They are the Chinbôks, the Yindus, the Chinbôns and the Welaung Chins, who are subdivided into a number of clans. A description of their main characteristics will be found in Chapter VIII of Volume I of the *Upper Burma Gazetteer*. The Taungthas of the Pakôkku district who numbered 5,704 at the Census are neighbours of the above. The following are the principal of the Central Chins of the Arakan Hill Tracts and the Akyab district, with the total of the persons who on the 1st March 1901 returned themselves as representatives of the various tribes,—Kami 24,937, Mro 12,622, Thet 232, Anu 588, Kyaw 215. Our knowledge of these tribes is very much what it was when Colonel Spearman wrote his 1880 Gazetteer. Major Hughes, in his *Hill Tracts of Arakan*, talks of the Kyaws (who are believed to have originally been pagoda slaves, offered to a local shrine by a queen of Arakan some three centuries ago) as being an off-shoot of the great Aryan family. Dr. Grierson has shown us that this view is erroneous and that the original home of the Kyaws was Lushai land. It may be noted that, if the returns are correct, there are no representatives of one of the races mentioned in the 1891 Census Report—the Kuns—left in the province. They have probably been absorbed by the Kami. The Daingnets (3,412) have hitherto been looked upon as allied to the Chins. The connection seems to me, however doubtful. It is my belief that one of the most useful services that the ethnographical survey can do will be to trace the affinities of the Northern Arakan Chins with the tribes of the Pakôkku Chin Hills, the Lushai Hills and the Chittagong Hill Tracts. I should be inclined to classify with the Central Chins the Chins of the Poko tract in the Kyaukpyu district and those of the Minbya township of the Akyab district. These tribes were, in consequence of their backwardness, enumerated non-synchronously. Of the Poko Chins the Deputy Commissioner, Kyaukpyu, writes as follows:—

"Maung Tun Hla U, the Township Officer of An, has given the following account of the Poko Chins. He states that nothing definite can be learnt from the *Taungmins* as to the origin, manners and customs of the tribe who, however, give the following traditionary account.

"It appears that the prefix 'Po' is a corruption of 'Ko,' being the Burmese numerical 9. The term 'Poko Ywa' means 'nine villages under the chief of a tribe called Po. The tribe appears to have lived by stealing cattle, &c., in the Burmese time. It is said that they settled at the source of the Dalet *chaung* about two centuries ago.

"The Poko tract is inhabited by another tribe called Monyin Gyi, Monyin Gale (မုံရင်းကြီး မုံရင်းကလေး), who speak a different dialect from the 'Po' Chins, but are under their dominion.

"The number of villages in the tract has increased from nine to seventeen.

"Po Nga Tin is the Chief or *Taungmin* of the tract, and it appears that he claims to be a lineal descendant of the *Taungmin*.

"The two tribes dress in the same manner (the usual Chin dress apparently), but have different marriage customs. It appears that the marriage dower of the Po tribe consists of spears, gongs, cymbals, &c., whereas that of the Monyin are white buffaloes and bullocks. They have separate grave-yards."

* * * * *

It is not quite clear from this extract whether Po is to be looked upon as "nine," the name of a Chief, or the designation of a tribe. The information will, however, be of use when the ethnographical survey is undertaken. It appears that a "Po Monyin" Chin dialect was known in the Minbu district in 1889, and it is possible that the Monyins may have come into the Kyaukpyu district from the east.

The habitat of the Southern Chins has been indicated above. Mr. Houghton calls them the tame Chins in contradistinction to the Northern or Wild Chins. In an appendix to his *Essay on the Language of the Southern Chins* he gives an account of some of the more interesting of their customs and myths, which have affinities with those of their northern brethren. The "Chins" returned as such at the 1901 enumeration reached an aggregate of 179,292 persons.

The origin of the name Chin is still undetermined. The Chins call themselves Yo, Lai, Zhô or Shu. It has been suggested that Chin is a Burmese corruption of the Chinese *Jin* or *Yen*, meaning 'man.' It is a far cry from Chinland to China, and I should be disposed to favour some other theory as to the birth of the expression. A more plausible derivation appears to be that indicated in the *British Burma Gazetteer*.

"Sir A. Phayre * * * considers that *Khyeng*, a name by which the Khyeng do not, now at any rate, know themselves, is a corruption of *klang*, their word for man, and adds, 'An Arakanese in writing down for me words from the mouth of a man of this race wrote Khyang (Burmanice, Khyeng) for what appeared to me to have the sound of Klang.'"

Mr. Houghton gives "Ak'laung" as one of the words for "man" in Southern Chin; Major Hughes in his *Hill Tracts of Arakan* gives "Hklap." According to the *Upper Burma Gazetteer* vocabularies, "man" is in the Taungtha tongue "Hkan" and in Chinbôk Chan. I should be inclined to think that these were all the same word. Our first real knowledge of the Chins must have filtered to us largely through an Arakanese medium. In itself the transformation of "Klang" into "Chin" is in conformity with the laws of phonetic change that govern the relations between the archaic Arakanese and the modern form of Burmese.

The Taungthus, Taungyos and Danaws.

182. If the story told by the Taungthus of their origin is correct, they must be of Talaing descent. In 1057 A.D. Anòrat'a or Nawra'hta, King of Pagan, is said to have invaded Thatôn and to have carried thence captive to Pagan the King of Thatôn, Manuha, his wives and children, and certain Buddhist scriptures, copies of which had been refused him by Manuha. The Taungthus claim to be the descendants of the remainder of King Manuha's subjects who, after the seizure of their capital and the deportation of their king, migrated north and founded a new Thatôn (the existing State of Hsatung) in the Shan States. Their legend has it that Manuha was a Taungthu. History relates, however, that the dominant race in the country to the north of the Gulf of Martaban in the 11th century was that of the Talaings, so that, if the Taungthus were members of that ruling race, they too must have Môn blood in their veins. Linguistically they show no traces of a Môn origin. They are believed to have Shan elements in their composition. The men as a rule clothe themselves like Shans; on the other hand, the women wear a dress resembling that of the Karens. Their tongue is a mixture of Karen and Burmese elements, and in many ways they seem more closely allied to the Karens than to any other of the peoples of Burma. Though they repudiate any relationship with the Taungthus, the Taungyos, whose habitat in the western part

of the Southern Shan States is much the same as the Taungthus, are probably closely connected with the latter race. The chief difference between the two appears to lie in the colour of the smock worn by the women. The Taungthu ladies wear black, the Taungyos affect red. They are classified together in the ethnology chapter of the *Upper Burma Gazetteer*. The Taungyo language, as exemplified in that work, strikes the observer as nothing more than a kind of bastard Burmese, or even Arakanese. Taungthu has much more Karen in its composition, but there are other elements as well. What might be looked upon as affording a clue to their origin is the Danaw race. Legend connects the Taungthus and Taungyos with the Danus or Danaws, another doubtful community who are their near neighbours in the Myelat. In many localities the Danu is now a mere Burmese-Shan hybrid who knows nothing of the Danu tongue. It is clear, however, that the original Danus or Danaws spoke a language that had remarkable affinities with several of the tongues of the Môn-Annam family, notably the Wa, the Hka Muk, and the Riang. This language is still spoken by the Danaws in some places. Moreover, the Danus, even where they have lost their ancestral vernacular, still refer to a reputed emigration from Siam and claim connection with the Riangs or Yins. I am inclined to think that in the end it will be possible to bring the Taungthus, Taungyos and Danaws, and conceivably also the Padaungs of Karenni, into the ethnical family, of which the Talaings, the Palaungs and the Was are all doubtless representatives and find a plausible explanation of their legendary migration from the south. All that it is possible to do now is to record their existence and admit that at present they are a puzzle. The strength of the communities in question in March 1901 was as follows: Taungthus 168,301, Taungyos 16,749, Danus 63,549, Danaws 635.

The Palaungs.

183. At the enumeration the total number of Palaungs was returned as 56,866. The Palaungs are found scattered through the Shan States, but are most numerous in the vicinity of the Kodaung tract of the Ruby Mines district and in the Northern Shan State of Tawngpeng. They are held to be a respectable, law-abiding community, whose habit of building their villages at a considerable elevation has led to their being studied less than some of their neighbours. Like the Taungthus they have a tradition of an ancient migration from Thatôn, which will probably be found to be nothing more than an indication that they are of Môn-Annam extraction. Their language has now been definitely placed in the Môn-Annam family, and linguistically they are connected both with the Was on the east and with the Danaws on the south. The Palaung men invariably wear the Shan dress. The women have a picturesque costume, which comprises a hood, coat, and skirt with leggings of cloth. It is well depicted in one of the illustrations in the *Upper Burma Gazetteer*.

The following extract from the District Census Report of the Deputy Commissioner, Ruby Mines, refers to the Palaungs who inhabit the *Kodaung* :—

Palaungs.

"The Palaung is a peaceful and industrious individual, but at the same time he is not only a coward at heart but a Jew in money transactions, and in business will always get the better of the Kachin by dint of his superior wit. He is a Buddhist, has monks and monasteries, and reads and writes Shan; but he cannot hold his own against the Kachin, and, when driven out, migrates altogether. The Palaungs of the various circles in the Kodaung appear to represent so many different immigrations from their original seat, said to be at the sources of the Anawma river, which the Hume men left 600 years ago. The dialect of one varies a good deal from that of another according to their own account of the matter, and even in the fashions of dress each circle has or had its own cut and idea of the becoming. The common Burmese division of the Palaung tribes into Palaungs and Palès is not admitted by the Palaungs of Hume and Maing-kwin, and from what they say it would appear to be fanciful and incorrect. The Palaung uses his own language when at home, but Shan is the religious and book language, and gives the village officials their only titles, *e.g.*, "Kang" or "Pu-kang," "Paw-möng," "Pak," "Pukye," "Pawng," "Kang-kung-möng," "Haw-sawng," "Min-hong."

The Was.

184. The Was, whose affinity with the Palaungs is probably more than one of language only, were for the most part excluded from the scope of the Census operations. On account of

the uncertain temper of its inhabitants, the wild Wa country, which lies to the east of the Northern Shan States, between the Salween and the State of Kēnghūng, was treated as an "omitted" area in 1901. It is therefore unnecessary to say more here than that the *Upper Burma Gazetteer* contains a full and graphic picture of both the wild and tame varieties of this interesting people. Here the reader will find described in the compiler's most attractive style the main peculiarities of the Wa, his taste for dog's flesh, his distaste for water, his primitive attire, his villages, with their quaint tunnelled approaches, his houses, his liquor bins, and his disagreeable head-collecting habits. Allusion is made elsewhere in the chapter on the religions of the people to the animistic idea that underlies the Was' head-hunting and is the guiding principle in the ceremonies to which the act of decapitation is but a prelude.

In the hills of Kēngtūng are tribes known as the Tai Loi or Wa Küt and the Hka La or Hka Lam which are divisions of the Wa race. It is possible that some of the other communities alluded to by Mr. Stirling in his article on Kēngtūng in the *Upper Burma Gazetteer, e.g.,* the En, the Pyin and the Hsen Hsum, can similarly be referred to the same stock. The totals outside estimated and omitted areas at the Census were as follows: Wa (unspecified), 5,964; En, 931; Hkala, 70; Hsen Hsum, 1,351; Tai Loi, 15,660.

The Kadus.

185. The Kadus, a people who inhabit portions of the Katha and Upper Chindwin districts in and near the old Shan State of Wuntho, are so rapidly losing their identity and assimilating their modes of life to those of their Burman and Shan neighbours that it seems doubtful whether the problem of their origin will ever be satisfactorily solved. That problem is as obscure as it is interesting. The Kadu language has been found by Mr. Houghton to bear a marked resemblance to that of the Saks or Thets, a small tribe of Arakan. Curiously enough, it also exhibits affinities with the Kachin, and Mr. Houghton would, on linguistic grounds, class both the Saks and the Kadus in the Kachin-Naga branch of the Tibeto-Burman race. The connection with the Saks of the Arakan Yomas is distinctly peculiar. Sir George Scott is inclined to account for it by the surmise that the original Kadus crossed the Chindwin as slaves of war from Arakan. This does not, however, explain the phenomenon of the presence in the Kadu language of a certain number of Kachin words. The only distinctive features of the Kadus' dress are the black jacket, petticoat and head cloth which a certain number of the elderly women still wear. Men and women of the younger generation almost habitually wear Burmese costume. Mr. Blake, Subdivisional Officer of Banmauk, has favoured me with a very full note on the Kadus. Space does not allow of its reproduction in full here, but I hope to make use of the new matter it contains in connection with the ethnographical survey of the province. The two theories of a Chin and a Kachin origin are dealt with in the following portion of that note:—

Origin.

"Who the Kadus are, whence they came and when, are questions which, having remained unanswered up to the present, are not likely to be answered in the future. The Kadus themselves, or rather some of them, say that they are descendants of a tribe of Chins which settled in the Katha district many many years ago, when the district formed part of the rule of the Shan Prince of Mogaung who had a subordinate in the Shwe *Sawbwa* of Mawnaing. From the accounts given by the people it would appear that many many years ago, the Chins inhabiting the village of Mônsabat broke up their village and came and settled in parts of the present Katha and Myitkyina districts. They were followed some time after by the inhabitants of Mahamyaing. Being subjects of the Shan Prince of Mogaung, they all paid their taxes to his subordinate, the Shwe *Sawbwa* of Mawnaing. On one occasion the original settlers, the Mônsabats, went and paid the *Sawbwa* the taxes due by all the settlers. On their return journey they met the Mahamyaings going to pay their taxes and so told them to return as all the taxes had been paid. The Mahamyaings would, however, not believe the tale, but proceeded to Mawnaing where they offered their taxes to the Shwe *Sawbwa* who refused to accept the money. On this the Mahamyaings went to the Shan Prince at Mogaung, who on receiving the taxes said that they were "apwa" and thus it came about that the original settlers, the people of Mônsabat, came to be known as "amas" and the Mahamyaings as 'apwas." In Ganan circle, where the Chins first settled, the people are still known as Ganan-mas and Gananpwas, though the "Amas" and the "Apwas" have intermarried for several generations, and a man calling himself "Apwa" may in reality be more of an "Ama." The

children are called after the father though the mother belongs to the other tribe. There is no object now in keeping up this distinction, but up to the time of the annexation and ever since the "Apwas" paid double tax to the Shan Prince, they have had to pay double what the "Amas" did.

"Another account, and one which has a ring of probability about it, is that the Kadus are descendants of Kachins who were settled in the Katha district and as far south as Shwebo many years ago. The Kadus who make this statement say that Kachin graves have been found in Ganan and other parts of the district, and from some of these necklaces and other ornaments of Kachin make have been dug up. One version is that the ancestors of the Kadus were a band of Kachins who were taken captives by Burmans and made to work by the latter at digging tanks and making canals. The Burmans called their captives Kantus (tank-diggers) which in time came to be corrupted into Kandus and finally Kadus. In proof of their Kachin descent these Kadus point to the similarity of several words in the two tongues."

These stories are variants of the legends given in the *Upper Burma Gazetteer*. The Kadus have by now developed into what are little more than hybrids. All the men talk Burmese and nearly all read and write it. The practice of staining the teeth of the women used at one time to be a distinctive feature of the Kadus, but, as Mr. Blake writes—

"In fairness to the present and rising generation, it must be said that, with few exceptions, the young women and young girls have not followed this dirty custom. The few young girls who stain their teeth are those who still adhere to the national costume."

This teeth-staining recalls some of the practices of the Brès of Karenni. The fact that it is confined to the fair sex gives a hint at a Chin origin and suggests an analogy with the tattooing of the faces of Chin women. As a disfigurement it is apparently a superfluity, for Mr. Blake implies that adding artificially to the uncomeliness of the average Kadu woman's features is like gilding refined gold. A total of 34,629 persons were returned as Kadus at the Census.

The Taws.

186. Sir George Scott in his Gazetteer treats the Taws of the Indauktha circle of the Katha district as differing racially from the communities in whose midst they live. According to the tradition given in the Gazetteer, the Taws are the descendants of a number of Pagan ladies whom the reigning monarch of Pagan, a man or rather woman-eating, birdlike being, considered unfit for human consumption and relegated to the jungles of Katha. The Deputy Commissioner of Katha, however, in his report on the Census operations, writes as follows :—

"Other people in the Pinlèbu township returned themselves as Taws, but, as the Myoôk, who is a local man, stated that the name was merely that of an old circle and not of a tribe of people properly so-called, this designation was not accepted, the people being shown as Shans."

As a matter of fact 833 people appeared in the schedules in Upper Burma under the designation of "Taw."

In the same communication Mr. Houghton alludes to a community known as the Kunyins, who have returned themselves as a distinct race and appear in the Census returns as such for the first time to the number of 283. I can find no reference to this people in the Gazetteer.

The Tamans.

187. Mr. Smyth, Deputy Commissioner of the Upper Chindwin, has sent me a few particulars regarding what is probably a hybrid tribe found in the Homalin and Uyu townships of that district and known as the Tamans. Their name as well as their habitat would appear to hint at a Burmese-Shan mixture, but their language, like Kadu, shows marks of a Kachin influence. Maung Myat Tun Aung, Subdivisional Officer of Legayaing, who has furnished the particulars above referred to, thinks that the Tamans are not Shans, but it appears probable that there is now more Shan than anything else in their composition. It seems to me that a study of the Tamans side by side with the Kadus might yield exceedingly interesting results. They numbered 829 persons in all.

The Lishaws, Lisaws or Yawyin.

188. There were 1,427 Lisaws returned as such in the Northern Shan States, in Kēngtūng and in the Ruby Mines district. In the past they were thought to be connected with the Kachins. Sir George Scott holds the bond of union, if any, to be extremely slender.

Their possible connection with the prehistoric Burman inhabitants of the Upper Irrawaddy basin has been adverted to in an earlier paragraph of this chapter. They are a widely scattered community, building their villages high up on the hill-sides. Their habits are, on the whole, more akin to those of the Chinese than of the Kachin; some of them are said to intermarry with the Chinese, but do not appear to do the same with other races. I am disposed to think that they are identical with the Lisus or Lissous mentioned by Prince Henri d'Orleans, who are thus referred to by Garnier:—

"Les Lissous, qui de toutes ces populations sont les plus sauvages et les plus indomptables, paraissent se rapprocher des tribus de langue melam qui habitent les parties tibètaines de la vallée de la Salouen et du Mékong. Leur type semble leur attribuer une forte proportion de sang caucasique; leur costume et leurs mœurs les rattachent aux populations précédentes (namely, the Lolos.)"

It is doubtless a good deal of this quasi-Caucasian type of countenance that has led observers to classify them with the Kachins. Apparently Sir George Scott considers the Lisus a separate race. It must, however, be admitted that, even if the Lisaws are not the Lissous, they must be closely related to them, for, as I have noted elsewhere, there is a marked similarity between the Lisaw and Lissou (Lisu) vocabularies given in the *Upper Burma Gazetteer*.

The Lahus.

189. The Lahu or Mu Hsö tribes are found here and there through the eastern portion of the Shan States, mainly between the Salween and the Mèkong. If language is to go for anything, the Lahus are of the same race as the Lisaws, and if, as surmised above, the Lisaws and the Lisus are connected, one is irresistably led to wonder whether the Lahu or Mu Hsö are not the Mu-sus or Mossos, of whom Garnier says, after having studied their physiognomy—

"On doit sans doute rattacher les Mossos au rameau tibetain."

Sir George Scott says of the Lahus:—

"They seem certainly to belong to the same *souche* as the Thibetans."

Apparently, however, the vocabularies do not give the same support to the theory of identity as is afforded in the case of the Lisaw-Lisu view. At one time the Lahus appear to have made common cause with the Was against the Chinese and to have been for a while successful. They are now a down-trodden race of wanderers with a good many Chinese characteristics. The Chinese call them Loheirh, the Shans Myen, and one division of them is known to the Shans under the name of Kwi. The total of Mu Hsös at the Census was 15,774. The Kwi numbered 2,882 over and above that total.

The Akhas.

190. The Akhas figured for the most part in the Census schedules as Kaws, the name by which the people are known to the Shans. A total of 26,020 Kaws were returned by the enumerators of the State of Kēngtūng. They are a heavily built, dusky race who inhabit the hills to the east of that State. Their features recall various types, their most noticeable peculiarity being a lower jaw that is abnormally developed for this region and is believed to hint at an Oceanic Mongol ancestry. Outwardly they in many ways resemble the Chinese and they show clear signs of Chinese influence. In the matter of dog-eating they are extraordinary catholic, not restricting themselves to any particular canine breed. Their language has not as yet been definitely classified but has been placed provisionally in the Burmese group. A photograph of Akha women given in the *Upper Burma Gazetteer* conveys an excellent idea of the dress of the females. The main divisions of the tribe are said to be seven in number. The Akö, referred to by Mr. Stirling in his article on Kēngtūng in the *Upper Burma Gazetteer*, are apparently a cross between the Kaw and some other race. There were 1,506 of them in March 1901.

The Hka Muks.

191. There are very few Hka Muks or Hkamets within the limits of the province. The total of 141 returned at the 1901 Census was for the most part found in the Shan State of Kēngtūng and in the Salween district. Philology claims them as members of the Môn-Annam race. They are a somewhat dusky community and resemble the

Karens (with whom, however, they seem to have no ethnical affinity) in the way their dress varies from tribe to tribe. They have been studied hitherto more from a French than from a British point of view. About Chiengmai they are largely employed as coolies by the Forest Department, and are described as being stupid but irreproachably honest and trustworthy. It is possible that the Loi of Möng Lwe are connected with this race.

The Riangs or Yin.

192. Like the Hka Muks, the Riangs or, as they were called in the Census schedules, the Yins, are probably of Môn-Annam extraction. In all 3,094 Yins were enumerated at the Census. The Riang region lies generally to the north-east of the cis-Salween portion of the Southern Shan States, but Yins are found here and there elsewhere. The most numerous tribe is known to the Shans by the name of Yang Lam. The two other tribes are denominated the Yang Hsek and the Yang Wan Kun. It seems clear that they have been settled in their existing seats for a very long time. They are almost certainly pre-Shan. The men have conformed to Shan fashion in the matter of raiment, but, as is the almost invariable custom among these eastern tribes, the women still adhere to their national dress, in this case one of dark-blue cloth, which Mr. Stirling tells us is sombre, but modest and becoming.

The Hpôns.

193. The Hpôns are a numerically insignificant community, who live in the southern portion of the Myitkyina and in the northern portion of the Bhamo district in the vicinity of the Irrawaddy. Their language, which is dealt with in the language chapter, is interesting, but they have now no particular attractions for the ethnographist. Whatever they were originally they have by now practically developed into Shans, and as such they seem to have been returned on the 1st of March 1901.

The Panthays.

194. The trans-Salween Northern Shan State of Son-mu is where the Panthays, a Muhammadan race known for the most part in Burma as caravan drivers, are found in greatest force. These Panthays or, as they are known to the Chinese, Hui-hui, are ordinarily looked upon as Yunnanese Chinese, and they doubtless have more Chinese blood in their composition than any other. The foreign strain appears to have been introduced with the Musalman religion by military immigrants several centuries back. As mule-drivers they are known well throughout the north-east of the province. Much has been written concerning the origin of the name Panthay. "Pathi" is doubtless a word in very common use among the Burmans as an expression for Muhammadans, and the inclination to connect it with "Panthay" is natural. It is the explanation to which the compiler of the *Upper Burma Gazetteer* seems on the whole to lean. Mr. Taw Sein Ko has, however, something new to say in the matter. A note on the word recently contributed by him to the *Indian Antiquary* is given below:—

"Now that both domestic and foreign troubles are falling thick upon the central Chinese Government at Peking, it is probable that we shall hear of the Panthays again. They are Chinese converts to Islâm, and large numbers of them are found in the provinces of Shensi, Kansuh and Yunnan. In the former two provinces they are known as Tungani or Hui-hui. In Burma and the adjoining Shan States, the Muhammadans of Yunnan are known as Panthay or Pang-hse. They are a fine and warlike race, and held Yunnan against Imperial troops from 1855 to 1873. In raising a British regiment at Wei-hai-wei, Chinese Muhammadans are much sought after by recruiting sergeants.

"In Northern China, the Chinese call the converts to Islâm Hui-hui, 回回, and the Yunnanese call them Hui-tzu, 回子. There is a great deal of contempt and hatred implied by the Chinese character 回子 as distinguished from 回, as the first part of the former means 'a dog.' Evidently the compliment is a reciprocal one, because the favourite epithet used by all Muhammadans in addressing the followers of other religions is 'infidel dog.' The Yunnanese also call the Chinese Muhammadans 'Fan P'an' or 'rebels.' Both the Burmese word 'Panthay' and the Shan word 'Pang-hse' are evidently derived from fan tsei, or pan tsei, which means 'a rebellious brigand.'

"The derivation of the word 'Panthay' appears to be one of the vexed questions of sinology, and I trust that the above solution will be acceptable to Chinese scholars."

In all there were 39 Panthays in the synchronous and non-synchronous areas of Burma on the 1st March 1901. Of these 31 were men and 8 women.

The Chinese.

195. The total of Chinese in the Province is an ever-growing one. The last decade has seen an increase from 41,457 to 62,486 in their numbers. If we except the Panthays, no members of the Chinese race are indigenous to Burma, but experience has shown that the Celestial takes kindly to the country, and, if one may venture on a forecast, it will not be long before he is one of its dominating elements. As merchants and traders the Chinese have established themselves firmly in all the commercial centres, while as petty contractors and carpenters they supply a much felt want throughout the length and breadth of the Province. In the purely rural areas they have hitherto had but little scope for their talents; but if Chinese agriculturists as enterprising and law-abiding as the artificers and traders of the present generation could be introduced into the country, I have no hesitation in saying that the economic welfare of Burma would be assured, for the Chinese amalgamate with the Burmans far more readily than do the Natives of India. The bulk of the Chinese in Burma come from the South of China and from the Straits Settlements. The immigrants from Yunnan and the South West of the Empire are fewer in number, but it is from this quarter, if any, that Chinese husbandmen must come. The Dayes, of whom 1,094 were recorded on the schedules, are said to be Chinese half-castes.

The Selungs.

196. Nothing fresh of importance has been learned about the Selungs, the sea gypsies of the Mergui archipelago, since the 1891 Census. They were enumerated non-synchronously by the late Mr. Clogstoun and showed a total of 1,325 souls, as compared with 1,628 at the preceding Census.

The Manipuris.

197. A total of 11,132 persons were returned as Ponnas and Kathès at the Census. These were lumped together in the abstraction office under the name of Manipuris. The following note by Mr. E. P. Cloney, Subdivisional Officer of Amarapura, shows that the two classes derive their origin from the same source. Any difference that exists would appear to be for the most part one of religion.

"*Kathè.*—The descendants of the Manipuris are known to Burmans by this name. 'Meiktein' is the name by which they distinguish themselves. It would appear that Manipur was invaded twice by the Burmese kings in 1120 and 1181 B.E. On both occasions the people—men, women and children—were seized and brought captives into Burma. Some of the captives were sent to Möng Nai (Mone). The rest were allowed to settle at Ava, Amarapura, in the southern parts of the Kyauksè district, and at Mogôk. At first the captives supported themselves by daily labour of all kinds. Gradually their children and grandchildren learnt weaving, spinning, &c., and they now support themselves mostly by silk spinning, weaving, &c.; some are cultivators.

"*Religion.*—Most of the descendants of the captive Manipuris have embraced Buddhism. Only a small number continue to follow the religion of their forefathers, Hinduism. The Buddhist Kathès have adopted the dress, customs, &c., of the Burmese, differing only in a few matters of custom and in speech.

"*Language.*—All Kathès nearly are bilinguists, speaking Manipuri or Kathè and Burmese.

"*House buildings.*—The Kathè does not as a rule build his house like the Burman off the ground with a plank or bamboo flooring. The house is low with an earthen floor and surrounded with a raised earthen platform called *hmangun* (၅§၃§), the same as one sees in most Hindu houses. Where, however, the village is likely to be flooded, the Kathè is compelled to build exactly like the Burman.

"*Courtship.*—In the matter of courting a girl, the younger generation follow the Burmese custom, but the marriage custom partakes of the Burmese and Hindu customs combined. In asking for a girl in marriage, the mother of the man and his female relatives go first to the parents of the girl, and ask their consent. On the second occasion, the man's father and his male relatives ask the consent of the girl's parents. On the day of the marriage *kado* by the bridegroom and bride is performed as is customary among Burmans; but besides the *kado*, Ponnas are invited to pronounce the benediction or *beiktheikmyaukgyin* (ဆိုသိမ်ကျွတ်ခြင်း).

"In most other matters, the Kathès' customs are the same as the Burmese now.

"Those Kathès that have not embraced Buddhism still keep up the Hindu customs and strictly maintain caste prejudices, refusing to eat or drink with those that are Buddhists, and abstaining from all flesh meat. They eat fish and salt-fish and vegetables, but will not eat *ngapi* pounded by Burmans.

"The Kathè is of a more mild and docile temper than the Burman, and is obedient and timid. He is respectful to his elders and supervisors, and is generally industrious and careful. He gives very little trouble, and is on the whole a good loyal subject.

Ponnas.—There are not many Ponnas in this subdivision. There are a few households in each of the villages of Yegyibauk, Shwegyetyet, Koko Ngèdo and Kyandan. These are called the Kathè-Ponnas and are practically unconverted Kathès, but they are decidedly not Brahmins as one understands a Brahmin of India.

"These Ponnas are not purely vegetarians as they eat fish.

"The Ponnas are cultivators, weavers and fortune-tellers. They preside at religious ceremonies too. In all manners and customs they are practically the same as the natives of India.

"The Ponnas are also bilinguists, speaking Kathè and Burmese or Wethali (Assamese) and Burmese; in some cases Hindi, Kathè and Burmese. The Ponnas are good, loyal subjects on the whole."

"Meiktein" is doubtless the same word as "Meithei," the name of the language of Manipur.

Europeans, &c.

198. Of European races the English are naturally the most strongly represented. The returns show 5,053 English males and 1,180 English females, as against 7,198 and 2,074 respectively enumerated in 1891. The withdrawal of British troops accounts for a portion of this decrease, but the rise in the total of Eurasians from 7,022 to 8,884 seems to point to the fact that the enumerators were somewhat more liberal in their interpretation of "English" in 1891 than in 1901. In all, 1,090 persons returned themselves as "Europeans." It is probable that some of these should properly have been included among the Eurasians. The total of Germans has fallen from 353 to 194 but in the case of all other European races there is no very marked variation on the figures of ten years back.

Exogamy and endogamy.

199. In India exogamy and endogamy are matters of prime importance in a comprehensive survey of caste. In Burma no such extraordinary interest attaches to these practices. They are not so marked as in India, nor are they governed by the same inflexible rules. It is, however, instructive to note how the exclusiveness or otherwise of customs in regard to matrimony varies from race to race. Roughly speaking, among the peoples of the plains, the Burmans and the Talaings, there are practically no restrictions on marriage, save those imposed by near blood relationship. It is only among the more primitive hill communities that anything approaching endogamy or exogamy is noticeable. According to Mr. Houghton, the Southern Chins, when selecting a wife, take one from some other clan than their own. It does not appear whether further north the Chins are exogamous in relation to the clan, but the Siyins at any rate are endogamous in relation to the tribe. The Sôktes too appear, so far as the tribe is concerned, to have endogamous leanings. Among the Hakas it would seem that political motives are as responsible as any for what exogamous tendencies prevail. Still the exogamy is there, whatever the motives were that produced it—and Mr. Andrew Lang's *Custom and Myth* shows us that as to the motives to exogamy there is considerable divergence of opinion. Among the Kachins a man may not marry a woman of the same surname as himself. Of these surnames or family names there appear to be a considerable number (ninety-seven are specified in the *Upper Burma Gazetteer*), so the choice is moderately large. Strange to say, side by side with this restriction exists a recognized custom which requires a man ordinarily to marry a first cousin on the female side. It is not mere blood relationship that is a bar; it is blood relationship through the father, *i.e.*, the relationship which brings with it the family name. This fact seems to constitute an additional item of evidence in favour of Mr. Andrew Lang's view that exogamy is not, as Mr. Morgan has held, the outcome of the discovery of the evils of close interbreeding, but is possibly one form of the *totem tabu*. So farreaching is this prohibited degree that persons of the same name will not intermarry even if they are members of different tribes. This is, as Mr. George points out, interesting not only because it suggests totemism but because it shows that the family distinctions are older than the tribal. Here we certainly have something not very far removed from the Hindu *gotra* and the Roman *gens*. Generally speaking the marriage customs of the

Kachin are a singular mixture of exogamy and endogamy. Another significant point is that among the Szis certain specified families whom we will call A's may take females from other families who may be denominated B's, but the B's may not take their wives from among the A's and are obliged to go elsewhere to other specified families for their consorts. Mr. George describes this as an arrangement "whereby one family is, so to speak, general parent-in-law to another family, and gives females only to the members of the latter family." The custom is interesting as being the nearest, in fact the only near, approach to hypergamy I have been able to discover in Burma. I think we may take it that the hill dwellers on our Western and Northern borders are fully imbued with the principles (whatever they may be) that are reflected in the practice of exogamy. Turning from the north and west to the east of the Province one finds that among the hill tribes such restrictions as are set on marriage are not exogamous, as among the Chins and Kachins, but, on the contrary, endogamous, and, as a matter of fact, endogamous to a very marked degree. At one time many of the Palaungs were sticklers for endogamy. In the past the members of the Pato Ru clan of this race did not look for spouses outside their clan. Now, however, there are no prohibitions in regard to matrimonial selections. It is further south among the Karens and their fellow dwellers amid the Eastern hills that endogamy is carried to its most absurd extremes. The Padaungs are quoted in the *Upper Burma Gazetteer* as almost the only exception to the rule ordinarily obtaining among the Karens that compels a man to marry one of his own blood. Among the Sawngtüng Karens "marriages are only permitted between near relations such as cousins," and only certain villages may intermarry with certain villages. The same is the case among the Banyang Karens. Here their abnormal matrimonial customs have reduced the race to the inhabitants of a single village of six houses, whose residents custom compels to contract alliances—apparently with extreme unwillingness,—solely among themselves. We shall have to learn a great deal more about the people of Karenni before it will be possible to attempt to account for their remarkable usages in connection with marriage.

Totemism.

200. The question of endogamy naturally leads to that of totemism. Sir George Scott says in the *Upper Burma Gazetteer*: "All the Indo-Chinese races have a predilection for totemistic birth stories. Some claim to be sprung from eggs, some from dogs, some from reptiles." The Was, like a tribe in North-West America cited by Mr. Andrew Lang in his *Custom and Myth,* state that their primæval ancestors were tadpoles. The Palaungs trace their beginnings back to a Naga princess who laid three eggs, out of the first of which their early ancestor was hatched. An egg-laying Naga princess figures in the early legendary history of the Mons or Talaings and points to an affinity between the Palaungs and the Talaings which the most recent linguistic research has done much to strengthen. The totemism suggested by the marriage customs of the Kachins has been adverted to in the preceding paragraph. Up to the present time all attempts to ascertain the origin of the Kachin family names have failed. The totem of the Kachins should, if anything, be a pumpkin, for legend has it that the whole race is descended from a being who was made out of a pumpkin. So far as I can discover, however, their belief in this singular genesis does not deter Kachins from eating the vegetable to which they owe their origin. They do not even appear to be precluded from gathering it under certain circumstances or at a particular period of the year, as is the case with some of the western Australian tribes. The Southern Chins on the other hand are forbidden to kill or eat the king-crow which hatched "the original Chin egg." The bird is regarded in the light of a parent, but, as it is not used as a crest by the Chins, Mr. Houghton is of opinion that it cannot be looked upon as, properly speaking, a totem. The rising sun of the Red Karens is something of the nature of a totemistic badge. Mr. Smeaton refers to it as follows in his *Loyal Karens of Burma*:—

"Every Red Karen has a rising sun—the crest of his nobility—tattooed on his back. In challenging to combat he does not slap his left folded arm with his right palm, as the rest of the Karens and the Burmans do, but, coiling his right arm round his left side, strikes

Map

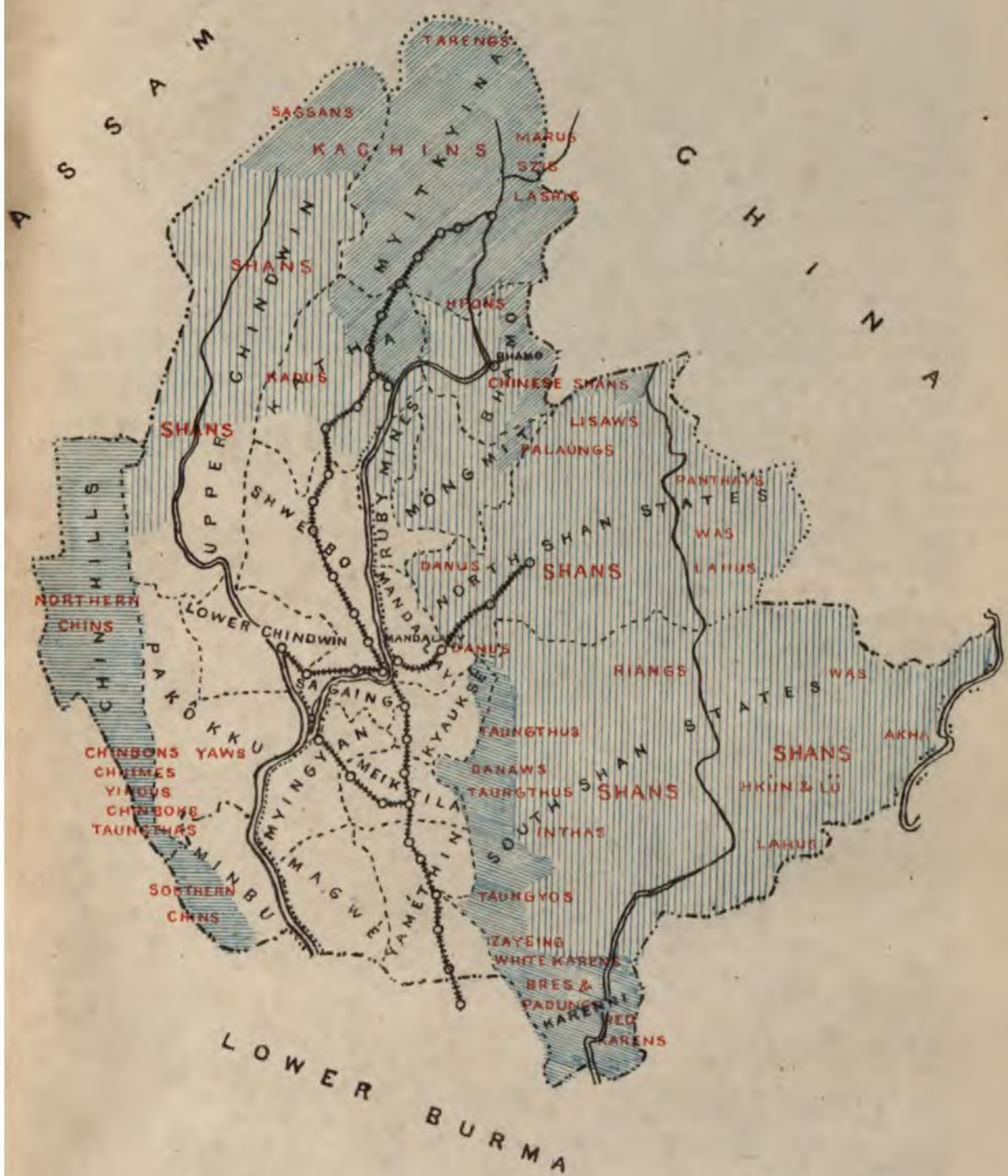
OF

UPPER BURMA

SHOWING

DISTRIBUTION OF PRINCIPAL RACES

(NON-BURMAN.)



REFERENCES.

The Shan country

The Kachin country

The Chin country

The Karen and Taungthu country

SCALE OF MILES.

0 50 100 150.

SUPT CENSUS 20-6-02—1,210.

CHAPTER IX.

OCCUPATIONS.

Subsidiary occupations.

201. It is generally acknowledged that one of the most laborious tasks to be undertaken in a census abstraction office is the extraction from the schedules of a record of the occupations of the population enumerated. The operations at the recent Census were no exception to the general rule in this one particular. Imperial Table No. XV, dealing with occupations, has been by no means an easy one to compile and while slip posting was in progress there were no columns that evoked such a tedious array of questions as Nos. 9, 10, and 11. This much may be said, however, that, when once the questions had been dealt with and the figures had been compiled, it was possible to feel what could not be fully felt in the case of caste, language, and birth-place, namely, that the labour spent had not been in vain even in the case of the non-indigenous residents of Burma. At the 1891 Census the record of occupations was confined to a single column of the schedule in which the means of subsistence of both actual workers and dependents figured alike. In 1901 three columns were provided for the information required, to enable the means of subsistence of those not supporting themselves to be shown separately from that of those supporting themselves, and to ensure the entry of any second or subsidiary occupation followed by the latter class. At the previous Census the only subsidiary occupation to be shown in column 11 of the schedule of that enumeration was that of "owning or cultivating land." In March 1901 all subsidiary occupations were entered in column 10. For abstraction purposes it was necessary to have on record only those subsidiary occupations which were agricultural, but on general grounds it was deemed inexpedient to leave it to the enumerated or to the enumerator to decide what were and what were not agricultural avocations. All occupations were accordingly entered and it was left to the Abstraction office to select the agricultural from the total of those returned and to enter the latter in that portion of Imperial Table No. XV which was designed to show what section of the people in addition to the regular agriculturists was more or less dependent on the produce of the land and thus likely to be affected to a greater or less degree by scarcity.

Subsidiary occupations of those whose main occupation was agricultural.

202. During the course of abstraction the Census Superintendent of the Central Provinces raised the question of the expediency of recording the subsidiary occupations of those whose main occupation was agriculture; and the compilation of a special table showing subsidiary occupations combined with selected principal occupations was suggested. It did not appear to me that a table of this nature was required in Burma and I expressed this view to the Local Government accordingly giving the following reasons for my opinion.

In paragraph 391 of his report Mr. Eales, when touching upon the question of subsidiary occupations, says:—

"In Burma the instructions issued by the Government of India that only one occupation was to be returned, except when agriculture was combined with another occupation, was strictly carried out. Any attempt to return complex and combined occupations, except thus restricted, would have been in Burma an almost endless and useless task. A Burman is a jack of all trades and a very large number of them have in their time worked at all sorts of employments. In India, where caste restrictions confine the vast majority of the inhabitants to certain well defined employments such a return would present, comparatively speaking, but little difficulty.

The above goes to the very root of the matter. In giving prominence to what I may call the industrial versatility of the Burman Mr. Eales merely enunciates what is a well-known fact to every officer who has had any experience of the Province. In India it might no doubt be instructive to learn how many field labourers, for instance, were also cart-drivers. There would be some guarantee

that the figures would not fluctuate to any very great extent from year to year. In Burma, on the other hand, the indigenous field labourer who returned his subsidiary occupation as that of a cart-driver one year might very well give it as that of a toddy-tree climber a second and of a fisherman or a sawyer a third. The ploughman who during one season spent his spare hours in earning a little money by wood-cutting might during another devote them to lime-burning or cutch-boiling, and it is clear that for spasmodic workers of this kind figures regarding dual occupations would be of no practical utility. I know of no subsidiary occupations other than agriculture which would furnish data of any real value for statistical purposes. I doubt, for example, whether the number of people who combine agriculture with money-lending in Burma is anything very great. There is nothing here like the union of the two occupations that is found in India. Under the existing system full particulars have been given in Table XV for one section of those who pursue both avocations, namely, for those returned as money-lenders who are also partially agriculturists, such as Chetties who have obtained a decree for and are working their debtors' fields. It is onfy in respect of those agriculturists who lend money as a subsidiary occupation that details of their second means of support are not shown, and it appears to me questionable whether the further data, if compiled, could be put to such use as would justify the labour entailed. It appears to me that it would be the same in the case of other occupations. It is instructive to know and we now do know how many traders, pleaders and the like there are in Burma who, in addition to their ordinary business, make money out of cultivation, but information as to how many cultivators find time to make a little profit by trading is by no means so likely to be of interest.

Difficulties experienced in compilation.

203. In 1891 the instructions for filling up column 11, though far more detailed than those for filling up any of the other columns, appear to have been often misinterpreted and the expansion of the single column into three in 1901 did little to simplify matters, added to which an unfortunate mistranslation of some subsidiary instructions regarding the omission of " household " workers was the occasion for some further misunderstanding. Errors in the occupation columns were, however, for the most part patent and capable of immediate rectification in the Abstraction office. A child of 2 shown in column 9 as a practising physician had obviously been wrongly dealt with and there was never any hesitation in putting the precocious infant in his proper place. The harm done was as nothing compared with that caused by the unhappy foreigner shown as " Hindu " by caste, as born in " India," and as speaking the " Hindu " language. In themselves the entries in columns 9, 10 and 11 presented as a rule no special difficulties. Contrasted with the entries in a European Census paper they would doubtless have seemed simplicity itself. The following extract from an article in *The Times* published in March 1901 and treating of the then approaching English Census gives some idea of the scope for error in tabulation afforded by a thoughtless return of occupation in a manufacturing country.

" The mere tabulation of such a mass of detail would obviously be a work of considerable magnitude, even if all the descriptions were clear and unambiguous. But this is precisely what they are not. The difficulty is twofold. A man engaged in some mechanical pursuit, say, will naturally describe his occupation by the name under which it is known to him and his fellows, without dreaming that the word used may be a technical one which is familar to none except those following the same or closely allied occupations and which gives no indication in what broad branch of industry he is to be classed. For instance, the term " pig-selector " to the initiated might seem to have an agricultural ring about it, but as a fact the worker who is entitled to that designation is engaged in the iron and steel industry. Again, " biscuit-placers " have nothing to do with baking bread, nor have all " saddle-makers " and " spur-makers " any connection with the manufacture of harness for horses. In many cases the unravelling of these mysteries is mainly a question of technical knowledge on the part of the tabulators, and naturally the Census authorities have a staff of clerks skilled in such learning who, by the aid of the elaborate glossaries that have been drawn up, can classify the strange designations received."

We have, of course, nothing approaching this complexity of industrial callings in Burma and as a rule the returns of occupation were perfectly straightforward and intelligible. I may say that in the schedules filled up in the vernacular there was hardly ever room for doubt as to the nature of the occupations shown. It

was only when the returns were made in English by an enumerator with an indifferent knowledge of the language that the meaning of some of the terms was obscure. "Hunting maistry" for instance was a puzzle for some time. A reference to the enumeration book concerned showed, however, that it was probably the title given by the enumerator to the headman of a gang of coolies employed in keeping the turf of the Rangoon race-course in order. Fortunately, however, instances of this kind were rare. Even when the entry in the schedule was unambiguous, there was always a danger lest the occupation writer's scanty acquaintance with English might lead to a ludicrous error. One prominent official who had returned himself as a "Civil Servant" would certainly have found his way into sub-order 14 (Personal and domestic service) had not the mistake been discovered in time and corrected. Slips of this kind were, however, reduced to a minimum by a system of check on the writers' work as it progressed.

Classification of occupations.

204. The classification of occupations adopted at the 1901 Census corresponded in its general outline with that employed at the preceding enumeration. The largest subdivision was the class, and of classes there were eight, as compared with seven in 1891. Class A (Administration), Class B (Pasture and Agriculture), Class C (Personal services), Class D (Preparation and supply of material substances), Class E (Commerce, Transport and Storage) and Class F (Professions) all covered the same ground as the corresponding classes of the earlier Census. The only change introduced was the division of the 1891 Class G (Indefinite and Independent) into two classes, namely G (Unskilled labour, not agricultural) and H (Means of subsistence independent of occupation). Each class consisted of so many orders, each order was split up into so many sub-orders, and each sub-order contained so many occupations, to each of which a separate number was allotted. Of orders there were 24, as in 1891, while the total of sub-orders was 78 or one less than the total of the "groups" of the preceding enumeration. In all the occupation numbers reached an aggregate of 520, as compared with 479 in 1891.

Contents of Imperial Table No. XV.

205. Imperial Table No. XV is printed in two parts. The first gives the Provincial total for actual workers and dependents against each of the 520 occupation numbers in the classified list of occupations, first for the Province as a whole, including the cities of Rangoon and Mandalay, and next for the two cities aforesaid. It also gives in the case both of the Province and of the cities the totals of partially agriculturists, males and females, against each one of the occupation numbers. The second part exhibits the totals for each district in respect of 169 callings selected as being the most representative and important in the Province together with the totals by districts for each sub-order, order and class in the occupation list. It contains no particulars in regard to partially agriculturists. The entry of data on this latter point is unnecessary in view of the fact that the Provincial Tables give the totals of partially agriculturists for each of the townships in Burma. No attempt has been made at this Census to show occupations by age periods. It is considered that the existing law in regard to the supervision of children in factories has already secured all the ends that the exhibition of age periods in the occupation table was intended to further.

Comparison with 1891 totals.

206. We may now proceed to examine the various classes, orders, sub-orders, &c., as they come, contrasting them, where a contrast is possible, with the corresponding figures of 1891. In connection with this latter point the following extract from a letter written by the Census Commissioner when forwarding the final list of occupations to Provincial Superintendents will explain how it is that the comparison with the returns of the previous Census cannot be fuller.

"Although the classes, orders and sub-orders have been retained the system now adopted for dealing with occupations differs very materially from that employed in the last Census. The figures of 1891 gave merely the population supported by the various occupations, males and females were mixed up and no attempt was made to distinguish workers from dependents. Makers and sellers again were shown together and no distinction was drawn between home industries and industries carried on in factories. In view of these wide discrepancies of treatment it seems doubtful whether any comparison with the statistics of 1891 will be possible."

The above applies more to the occupations themselves than to the classes, orders and sub-orders of which they form the constituent parts. In the following remarks where comparisons are drawn they will in the main be between the sub-order and order totals for the two enumerations.

Class A—Government.

207. The total of sub-order 1 (Civil service of the State) is 69,831 as against 86,887 in 1891. An examination of these totals side by side with the totals for sub-order 4 (Army), which, despite the reduction in the regular troops and the Military Police has risen from 30,828 to 33,146, inclines me to the belief that the 1891 figures for sub-order 1 included a number of Military Police. I can account in no other way for the decrease. Sub-order 2 (Service of Local and Municipal bodies) shows an increase from 4,952 to 6,337 and sub-order 3 (Village service) has leapt from 11,733 to 73,213. This latter rise bears eloquent testimony to the extension of the village headman system throughout the province during the ten years that have just elapsed.

Order III, comprising sub-orders 6 and 7, is headed "Service of Native and Foreign States" and contains figures in respect of Shan *Sawbwas* and their immediate followers. As the Shan States were barely dealt with in 1891 it is not surprising that the total of this order should have risen from 192 to 8,478.

In Order II (Defence) of Class A the proportion of actual workers to dependents (74·35 to 25·65) is unusually high. This is, in view of the foreign composition of the military element in the country, natural enough. The indigenous element is, however, so much the more predominant in Class A as a whole that its proportion of actual workers is only 39 per cent., which, curiously enough, is lower than that of any other of the classes.

Class B—Pasture and agriculture.

208. The total of Class B (Pasture and Agriculture) is 6,947,945, or 67 per cent. of the total population of the province. In 1891 the corresponding figure was 4,879,490; in other words, as my predecessor pointed out, the Pastoral and Agricultural class then comprised 6,415 out of every 10,000 persons of both sexes. It will thus be seen that the proportion of agriculturists in the wider sense of the term has risen by 285 per ten thousand during the past decade. The opening up of the delta districts to the foreign and Upper Burma immigrant must be looked upon as part cause of this rise, but the main factor in the increase is, no doubt, the inclusion in the operations of the political areas in which the agricultural element preponderated. Sub-orders 8 to 13 inclusive are comprised in Class B. The first of these (stock breeding and dealing) shows a general increase in the case of nearly all occupations. Herdsmen and persons supported by herdsmen have risen in number from 22,273 to 46,463. The 1891 figures were, Mr. Eales implied, smaller than what one would have expected had it not been for the fact that herding is pursued more as a subsidiary than as a principal occupation, and the rise that has taken place in the past 10 years calls for no special comment. Elephant catchers are fewer in number than 10 years ago. Twelve males and a female have been returned as camel breeders. It is probable that this is an error in classification unless the thirteen individuals were immigrants and camel breeding was their last occupation in India. Pig breeders are a good deal more numerous than at the last Census.

Sub-order 9 deals with the training and care of animals. The only item in the sub-order that attracts attention is the large total of 6,415 under occupation No. 35 (Vermin and animal catchers). Here I think that in a certain number of cases the entry of 36 (Rent receivers) has been wrongly read as 35 by the tabulators and entered as such in the tabulation sheets.

Landholders, tenants, &c.

209. In all 717,753 persons came into the landholder and tenant category which sub-order 10 embraces. There were two occupation heads in this sub-order, namely, 36 (Rent receivers) and 37 (Rent payers), and of these the former furnished the lion's share of workers. Three classes, farm servants, field labourers and *taungya* or jhûm cultivators, made up the total of 5,739,523 described under sub-order 11 as Agricultural labourers. Subsidiary Table No. IXA appended to this chapter shows us that this sub-order alone contains 55·38 per cent. or well over half of

the total population of the province. As in 1891 the total of farm servants was insignificant. The great bulk of the agricultural community returned itself as cultivators pure and simple (*le lôk*) for which occupation No. 39 (Field labourers) was thought the nearest equivalent. The total returned under this head was 4,322,120. It must be admitted that the classification of agricultural callings adopted was not specially suited to the requirements of the Province. The term "Rent payers" would properly cover the very large class of State land workers in Upper Burma who pay rent for their holdings direct to Government, and if it had been decided to require all agriculturists in Upper Burma to state whether the land they worked was *bobabaing* or State it might have been possible to secure fuller returns for occupation number 36 than were actually obtained. An instruction of this nature would, however, have been directly opposed to the policy of dissociating the Census as far as possible in the minds of the people from revenue collection and it has thus been found necessary to sacrifice a certain amount of detail to the susceptibilities of the enumerated. It is, moreover, a question whether in a country like Burma the duty of differentiating nicely between the various classes of agriculturists is one which need be thrown upon the Census department. One thing seems, in the light of the 1891 enumeration, clear enough, that is, that of the total of 286,182 actual workers returned under the head of "Rent receivers" only a portion consisted of persons who worked no portion of the land they owned. The total of *taungya* or jhum cultivators and dependents was 1,416,651. In 1891 the *taungya* cutters were classed with market gardeners or vegetable growers, and their precise total is not now ascertainable. It must, however, have been far below the 1901 figure. I am led to hold this view because an examination of the district totals showed me that the abstraction staff had classified as *taungya* cutters a number of agriculturists who must in reality have cultivated millet, sesamum and other *ya* or upland crops in the dry districts of Upper Burma.

Growers of special products.

210. In consequence of the classification of *taungya* cutters adopted in 1891, the total of growers of special products is far smaller now than ten years ago. The items under this head exhibit no features of special interest. The record of occupations in the Shan States has resulted in a large return of tea growers. In 1891 the total of tea planters, &c., was shown with other totals under a head the bulk of which consisted of tobacco growers, and it is impossible now to gauge the extent of the increase, if any, under tea cultivation. Sub-order 13 now comprises besides agricultural training and supervision, the figures for Forests, so no profitable comparison of the sub-order totals of the two enumerations is practicable. The heading "Directors of Agriculture and their staff" included Superintendents and Inspectors of Land Records. Who the 87 persons returned as agricultural chemists and experts were is not quite clear. Class B shows a higher percentage of dependents than actual workers. The figures are 42·4 for the latter and 57·5 for the former. In all 99·8 per cent. of the persons represented in this class were country dwellers and only 0·2 per cent. were enumerated in the two cities of the Province.

Partially agriculturists.

211. The total of persons partially dependent upon agriculture for their living has been returned as 47,524, of whom 31,648 are males and 15,876 females. The majority of these partially agriculturists were enumerated in rural areas, the total for the two cities of Rangoon and Mandalay being 3,507 males and 154 females only. Subsidiary Table No. IX B appended to this chapter indicates what proportion the persons of this kind comprised in each of the eight occupation classes bear to the total of the class. Their distribution over the districts and townships of the Province can best be gathered from the Provincial Tables. The Class which contains the largest percentage of partially agriculturists is Class A (Government) with 2·6 per cent. Class D can claim 1·5 per cent. and Class E 1·4 per cent. of workers of this kind, but in all the other classes except class C, the proportion is below one per cent. and for the whole province is barely one-half per cent., so that one is led to the conclusion that, broadly speaking, the partially agricultural portion of the com-

munity is almost a negligeable quantity. The occupations which return the largest number of partially agricultural folk are cotton weavers (5,566), toddy drawers (3,218) and coolies (2,874).

Class C.—Personal services.

212. I was at one time not without misgivings lest the total of persons shown in Class C as servants should have been unduly swelled by a mistranslation of the orders to supervisors in regard to the treatment at the enumeration of women and children whose daily work was incidental to domestic routine. The intention was that these household workers—the mother who cooked for the family, the daughter who husked paddy for its consumption—should not be shown as actual workers, but as dependents, but, through a misconception in the Government Translator's office, the Burmese version of the orders conveyed the contrary impression. The slip was discovered before the final enumeration, but so shortly before that it was not always possible to take action on the corrigendum issued and there were in consequence a large number of persons shown as cooks, water carriers, and the like who should properly have been returned as dependents. As I have explained in an earlier paragraph, improper entries of this nature which bore on their face obvious evidence of error were dealt with in the Abstraction office with the result that the aggregate of sub-order 14 (Personal and domestic service) though a good deal higher than in 1891 (89,765 against 50,240 persons) shows no signs of any abnormal inflation. The next sub-order (15, Non-domestic entertainment) shows a large total under the head of refreshment-room keepers, which title covers the proprietors, &c., of the numerous eating-houses that have been established in all the larger centres of population. The highest figure in sub-order 16 (Sanitation) is under No. 74, Sweepers and Scavengers. Here the total is much the same as in 1891.

In view of the large number of natives of India in Class C it is not surprising that the percentage of actual workers is large and that of dependents comparatively insignificant (66·6 and 33·3).

Class D.—Preparation and supply of material substances.

213. Class D, which deals with the preparation and supply of material substances naturally presents the longest list of occupations. It contains 11 orders and 37 sub-orders, and its total of 1,923,084 actual workers and dependents comprises practically the whole of the artizan section of the population, which may thus roughly be said to form 18·5 per cent. of the community. Those callings that are connected with the provision and preparation of food, drink and stimulants are covered by the first three sub-orders (Order VII). Into this category come fishermen, with a total of 126,651 workers and dependents, fish dealers with 77,154 and grain and pulse dealers with 78,489. Rice pounders and huskers number in all 50,039. It is possible that some of these are domestic workers who do not pound for hire, but the fact that there was no special head for this occupation in the 1891 table renders criticism of the total a matter of some difficulty. A substantial item in the second of the sub-orders concerned is the total of 47,191 under the head "Rice-mills, operatives and other subordinates." As is to be expected the total of dependents in this last calling (8,863) is comparatively insignificant. The bulk of the workers in the rice-mills of the Province are temporary male immigrants from India who come to Burma unencumbered by their families. Toddy drawers (workers and dependents) number in all 70,918, of whom 21,725 are male workers. Toddy sellers, on the other hand, show an aggregate of 3,167 only and the total of the two occupations together is below the 1891 figure of 82,755. It is much the same with the makers of sugar, molasses and gur by hand; there is a decrease on the figures of the preceding Census (19,487 against 20,855) and the return are not without indications of a falling off in the toddy and jaggery industry. It is possible that the depression is temporary only.

Order VII.—Food, drink and stimulauts.

214. Order VIII of Class D is concerned with lighting, firing and forage. The last ten years have seen a substantial advance in the exploitation of the petroleum area in Upper Burma and the total of 3,330 which, for want of a better classification, has been placed under the head "Petroleum Refineries, workmen and

Order VIII.—Lighting, firing and forage.

other subordinates," represents the bulk of the population who are supported by the extraction and refining of the crude earth oil of the Province. The 4,044 petroleum and kerosene oil dealers (with their dependents) shown under the next succeeding head are concerned on the other hand with the refined Russian and American petroleum so largely used by all classes in Burma. Sub-order 21 deals with fuel and forage.

Order IX.—Buildings.

215. Order IX deals with buildings and the two sub-orders it embraces are headed "22, Building materials," and "23, Artificers in building." In Burma mat and thatch are the prevailing building materials and the most strongly represented occupation in this order is that of thatcher, which maintains 30,645 workers and dependents. Thatch dealers number 3,301 and the two occupations combined are the means of support of 5,961 more persons than at the Census of 1891.

Order X.—Vehicles and vessels.

216. Order X, which is devoted to the occupations relating to the manufacture of vehicles and vessels, claims the comparatively small total of 14,019 actual workers and dependents. It remains numerically at about the same level as at the last enumeration. A noticeable fact, however, is that, while cart makers and the like are more numerous now than ten years ago, the total of boat and canoe makers has fallen. Improvement in land communications explains the former increase no doubt; but the causes of the diminution in the boat-building business remain somewhat obscure.

Order XI.—Supplementary requirements.

217. Supplementary requirements, details of which are given in Order XI, consist of a large variety of callings providing a living for 14,124 male and 5,983 female workers, of whom nearly 30 per cent. labour in cities. In this order are found the paper makers, the wood carvers, the lacquerers, the toy makers and the cutlers of Burma. A rough paper used for wrappers, umbrellas and the like is made in Möngnai and elsewhere in the Shan States. A description of its manufacture is given at page 427 of the second volume of Part II of the *Upper Burma Gazetteer*. Lacquerwork was the means of support of 14,274 persons of both sexes. Of these 4,277 males and 2,072 females were actual workers and of the actual workers 1,426 males and 1,294 females came from the Myingyan district, the headquarters of the lacquerwork industry. The article on this district in the *Upper Burma Gazetteer* contains an account of the processes followed by lacquerers in their work. Wood carvers abound in Mandalay and Rangoon. Ivory carving flourishes most in Moulmein. Nearly all the 25 actual workers shown under this latter occupation were enumerated in the Amherst district. A useful monograph on the ivory-carving industry of the Province has been written by Mr. H. S. Pratt.

Order XII.—Textile fabrics and dress.

218. Textile fabrics and dress form the items of Order XII of Class D. Three occupations stand out with prominence in this order, namely, those of silk weavers, cotton weavers and cotton spinners. In all three the female actual workers exceed the male in number. In all 136,628 women and girls returned themselves as cotton weavers at the Census. The corresponding total in 1891 cannot now be ascertained, as mill owners and managers were then included under the same head as workers by hand, but it seems probable that the total of females who gave cotton weaving as their occupation was somewhat lower on the 1st March 1901 than it had been ten years before. There can hardly be any question, I think, that the figure returned at the recent Census represents a portion only of the female population who were in the habit of weaving cotton cloths, but the line between the weaver who weaves for a living and the weaver who produces nothing more than a sufficiency of coarse cloth for home consumption is as a rule so shadowy and indefinite that considerable divergencies in the returns for the two enumerations must be allowed for. Mr. G. F. Arnold is the author of a monograph on the cotton fabrics and the cotton industry of Burma, as Mr. J. P. Hardiman is of a note on silk in Burma. Silk weaving is by no means so universal or so domestic an occupation as cotton weaving. It flourishes most in Prome Mandalay and Tavoy. Silk weavers were in the 1901 occupation list lumped

together with silk carders and spinners and makers of silk braid and thread, but the great bulk of the 5,973 males and 18,316 females returned under the occupation number concerned were undoubtedly engaged in weaving. Judged by a comparison with the 1891 figures (so far as such comparison is possible) the silk-weaving industry would seem to be making headway in Burma. Owing to the large proportion of female weavers the percentage of actual workers in Order XII (71·74) is more than ordinarily high.

Order XIII.—Metals and precious stones.

219. Workers and dealers in gold, silver and precious stones and their dependents constitute nearly half of the total returned under Order XIII. Taking dependents and their supporters together there were 42,112 workers and 11,800 dealers in Burma on the date of the Census, while the total of the whole order was only 94,723. In 1891 the population concerned with precious metals and jewels was spread over a far larger number of heads than in 1901, so that a detailed contrast of occupations is of no particular value, but there is an increase from 36,453 to 56,400 in the sub-order concerned (No. 43) which is ample proof of the fact that the demand for luxuries of the nature in question is not in any way diminishing in the province. Mr. H. L. Tilly has written on the brass and copper wares of Burma. Table XV tells us that 4,076 persons of both sexes were artizans in brass and copper or were supported by brass and copper workers. As Mr. Tilly observes, the Burmese do not use copper utensils for cooking and practically the whole of the population returned under occupation No. 322 were brass workers. Experts in tin, zinc, quicksilver and lead numbered in all 5,135 actual workers and dependents. This total included the tin miners of Mergui no less than the *kalai walas* of the industrial centres. Of non-precious metals iron claimed the largest number of artizans. There were 9,580 males and 1,017 females who returned themselves as actually employed in working in iron and hardware on the 1st March 1901.

Order XIV.—Glass, earthen and stoneware.

220. The only occupation that is deserving of special comment in Order XIV is that of the potter. The ordinary rough pottery of the province is well known and as the greater part of the indigenous cooking of Burma is done in earthen receptacles, the potter is ubiquitous. The actual workers and dependents connected with the production of pottery (occupation numbers 334, 335 and 336) numbered in all 19,800 or 0·19 per cent. of the total population of the Province. Considering the extensive use of earthenware the total would seem unduly small. It must be borne in mind, however, that pot-making is often a subsidiary occupation combined with agriculture, and further that a good many of the persons returned as brick-makers were also potters. The earthenware of the province has usually no pretensions to beauty of form. Here and there, however (as for instance in Pyinmana, Myinmu and Kyaukmyaung), glazed pottery is made which is not without artistic merit both in the matter of shape and of colour. Pot-making is essentially a rural avocation. Less than 2 per cent. of the actual workers in earthen and stoneware pursued their calling in the cities of Rangoon and Mandalay.

Order XV.—Wood, canes and leaves.

221. Timber is so important a produce of the country and wood so popular a material for building purposes that those who have dealings with wood are naturally numerous. Nearly every large village has its saw-pit or two, the saw-mills of Rangoon and Moulmein employ a host of workmen, while the timber and bamboo rafts form a feature of all the principal waterways at most seasons of the year. Wood and bamboos (sub-order 49) supported 159,276 souls or rather over 1·5 per cent. of the total population whose occupations have been returned. Connected with the above occupations is that of mat making, which found employment for 16,001 male and 12,692 female actual workers on the 1st March 1901.

Order XVI.—Drugs, gums and dyes.

222. There is little requiring detailed comment in Order XVI, which gives particulars regarding those who were concerned with drugs, gums and dyes. Cutch is the most important of the products dealt with in this order. Catechu

preparers numbered 1,294 workers, catechu sellers 589, while under cutch factories total of 20 males and females where shown. Nearly all the districts of the dry zone of Upper Burma return a substantial number of cutch-boilers and Thayetmyo and Prome in Lower Burma also furnish a share of the total. The local druggist squatted behind his array of simples is a well-known figure in every Burman bazaar. Chemists and druggists give a total of 98 male and 44 female workers only. The bulk of the village pharmacists come under the more comprehensive term of "persons occupied with miscellaneous drugs" (4,635 workers and dependents). Dyeing is largely a subsidiary occupation in Burma and it is probable that the figures under "Dye-works" and "Persons occupied with miscellaneous dyes" are but a fraction of the total population engaged in the dyeing industry, which Mr. J. D. Fraser has fully described in a monograph published in May 1896.

Order XVII.—Leather.

223. Shoe-makers (2,602 male and 538 female workers) form the bulk of the population concerned with the preparation and manipulation of leather. The Burman-sandal has comparatively little leather in its composition, and an attempt was made in abstraction to discriminate between the makers of indigenous foot gear of this kind, who are ordinarily Burmans, and the makers of leather shoes, the majority of whom are Chinamen or Natives of India. The former were returned under occupation number 305 (makers of shoes not leather) and totalled 12,864 workers and dependents, the latter under number 387 and gave an aggregate of 5,635 of all classes supported directly and indirectly by the industry. I think that these two totals represent approximately the strength of the home and the foreign branches of the shoe-making craft. The total of the two occupations combined is very much the same as the figure returned in 1891 under the head "shoe, sandal and boot-makers and sellers" (17,588).

Class E.—Commerce, transport and storage.

224. Of the total population of the Province whose occupations were recorded, 449,955 or 4·34 per cent. were engaged in or were dependent upon persons engaged in the commercial callings detailed in Class E. In all 81·84 per cent. of the total workers in this class were enumerated in rural areas and 18·15 per cent. in the two cities of the Province.

Order XVIII.—Commerce.

225. In Order XVIII (Commerce), one of the points that arrests attention is the comparatively large number of females who are shown as pursuing commercial avocations. In the case of sub-orders 54, 55 and 56 ("Money and securities," "General merchandise" and "Dealing unspecified") the total of male actual workers is 60,938 and that of female actual workers 35,538 or rather more than half, and the details under female money-lenders, money-changers, bill-collectors, general merchants and shopkeepers disclose a state of things that probably finds no counterpart in the rest of India. The figures in this order give, in a word, an almost startling insight into the position that the energy and capacity of the Burman woman have won for her in the social economy of the country. Even in sub-order 57 (Middlemen, brokers and agents) the female element asserts itself. It is possible that some of the female brokers and contractors shown as actual workers in the columns of Table XV may not have been entitled, strictly speaking, to the denomination, but those who know the Province will be ready to admit that the figures give by no means an unreal picture of the part played by woman in Burma in the business transactions of the country.

Order XIX.—Transport and storage.

226. Order XIX deals with transport and storage. The details of the first sub-order of this order (58, Railway) are interesting in so far as they are a measure of the growth of railway communications during the past decade. In 1891 the total of actual workers and dependents under all Railway heads was 8,976 only. At the 1901 Census the corresponding figure was 11,594. The increase is fully accounted for by the construction of the Sagaing-Myitkyina, the Sagaing-Alôn, the Thazi-Myingyan and the Northern Shan States lines, all of which have come into existence within the past ten years. Sub-orders 59 (Road transport) and 60 (Water transport) contain two large items, namely, cart-owners and drivers,

71,676 workers and dependents, and boat and barge men, 88,415 workers and dependents. I have adverted, in the paragraph dealing with Order X, to the increase in cart building during the past ten years and to the apparent decline in the boat-building industry. The probability that improved land communications will tend to the partial supersession of boat by land carriage seems hinted at by the figures for transport; for whereas land transport now supports 79,306 workers and dependents against 59,549 so supported in 1891, water transport finds occupation for 113,941, or less than a thousand persons only more than ten years ago. The growth of the two main classes of transport has been by no means equal. The totals for the last two sub-orders of Order XIX, which contain figures for Post Office, Telegraphs and Storage and Weighing, have nothing suggestive to show. Nearly 70 per cent. of the actual workers in the last sub-order (62) were enumerated in the cities of Burma. With the exception of sub-order 28 (Books and Prints) this is the highest proportion of urban workers in any of the sub-orders.

Class F.—Professions.

227. The professional section of the population of Burma numbered 264,047 workers and dependents, a figure which represents 2·54 per cent. of the total population whose occupations were recorded on the schedules. In Class F the actual workers are slightly in excess of the dependents, a state of things which seems somewhat peculiar when it is borne in mind that the number of professional females is comparatively small and that the Indian element does not enter much into the composition of the professional classes. Space forbids me to dwell at any length on the professions followed by the people of the country except two, tattooing and midwifery, callings which, at the suggestion of the Census Commissioner, have been dealt with rather more fully than the rest.

Learned professions.

228. The first of the learned professions, the religious, is strongly represented in Burma. The total of 75,365 male actual workers shown under the head "Religious mendicants, inmates of monasteries, convents, &c.," represents generally the strength of the indigenous Buddhist priesthood. No attempt was made at the recent Census to discriminate between *Pôngyis, Upazins* and *Koyins*, and scholars now figure wholly in the dependents' column instead of having a separate occupation number assigned to them so that detailed comparison of the items of which sub-order 63 is made up is of no particular value, but the total of the sub-order gives no indication of any diminution during the past decade in the strength of the religious orders of the Province. Education too (sub-order 64) exhibits a higher aggregate than it did ten years ago. Literature (sub-order 65) shows a rather large total under the head "writers (unspecified)." This represents the sum of persons entered as "Clerks" whom it was found impossible to assign to one or other of the many clerical heads under Administration, Commerce and the like. Law (sub-order 66) exhibits a very considerable increase on the 1891 figures. The latter aggregated 4,279. The 1901 total was 7,507. Barristers and Advocates have risen in number since the last enumeration, but the principal growth is in the total of lawyers' clerks and petition-writers with their dependents. Sub-order 67, dealing with medicine, similarly shows an increase on the figures of the previous Census. The total of practitioners without diploma—the class in whose hands the care of the bodies of the bulk of the people of the Province still unfortunately rests—has risen from 37,276 actual workers and dependents to 43,252.

Midwives.

229. A total of 1,942 females returned themselves as midwives at the enumeration. In 1891 the total number of persons dependent on midwifery was 819. The sex and age figures show that of these the actual number of persons actually following the calling of a midwife must have been less than 500. There can be little doubt that a large proportion of the women who made a practice of attending at child-births must have then been returned under some other head of occupation. This fact in itself is indicative of the haphazard, amateurish view taken by the people of the country of the profession upon which such important issues hang. Not only is it ordinarily combined with some other occupation, but in the majority of cases it has occupied so subordinate a position as to have been not thought worth recording.

It has long been well known that the obstetric methods obtaining in Burma were deplorable. The following extracts from a note on Burmese midwifery which Dr. T. F. Pedley of Rangoon has kindly placed at my disposal gives a very clear idea of their barbarity. Dr. Pedley's knowledge of this branch of therapeutics in Burma is probably unique :—

The Burmese have, according to western notions, extraordinary ways of treating their women at the time of child-birth. It is unnecessary here to describe in detail what really takes place upon these occasions, but it may at once be said that it would be difficult for blind ignorance and superstition to devise a more miserably cruel system of interference with the ordinary course of nature at a time when unnecessary interference is fraught with peril to human life. These methods are so frequently followed by disastrous consequences to either or both mother and child, that they are regarded with astonishment by European practitioners of medicine.

The indigenous midwives come from the lowest and poorest class, their chief title to practice usually being that they are old women who have themselves passed several times through the dreadful perils which their system entails. While the calling of a midwife is regarded as menial and defiling, her assistance is believed to be absolutely necessary, and she is better paid than in many parts of India.

A woman expecting to be confined lays in a large store of fire-wood, one or two hundred-weight. A shallow box, four or five feet long by three or four wide, is placed in the lying-in room. This is filled with sand or earth and formed into a kind of hearth upon which a fire is made ; the heat and smoke render the air of the apartment stifling, for no exit is provided for the smoke. The choice of the lying-in room is not influenced by any regard to its sanitary surroundings. Etiquette forbids that a woman, especially at this time, should lie in an upper room, even if one is available, because she might be upon a higher level or above the heads of men entering the house. The darkest, dirtiest and worst ventilated, a place hardly fit for a dog to lie in, is usually chosen and that by the patient and her female relatives.

The great object of the midwife is to expedite the birth ; for this purpose firm pressure is constantly made by two or three women with their hands upon the abdomen. Very often it is used long before it can have the desired effect of expelling the child. Often the pressure is very severe and sometimes the midwife kneels or stands upon the abdomen, and even more outrageous means are not unfrequently resorted to.

After the birth the mother is placed as close as possible to the fire, and hot bricks or stones wrapped in rags are applied to the abdomen and other parts, as hot as they can be borne ; often the skin is blistered thereby. She is rubbed all over with turmeric and is given hot water to drink ; she has to smell little bags of crushed herbs, or plugs of betel leaves are pushed into her nostrils. A tent of thick calico is hung like a mosquito net over the mat on which she lies, and she must remain inside this day and night except on occasions when two or three times a day she is taken out and made to sit near the fire or over smouldering embers on which turmeric is thrown, or over steam from hot bricks. Her diet meanwhile consists of dried salt-fish and boiled rice, with hot water only to drink.

In health the Burmese woman is usually cleanly and when water is available bathes frequently, but at this time and in times of illness she is not allowed to touch water for purposes of ablution. If she becomes feverish or otherwise ill from the treatment or surroundings she is not washed perhaps for a month, and the bodily uncleanliness becomes indescribable.

According to the Burmese notions the odour of cooking food or the smell of burning oil in which much of their food is cooked, is a pernicious poison to a sick person, a lying-in mother or a new-born child, and every precaution is taken to prevent the access of such odours by shutting the invalids under the tents before described.

On or about the eighth day the mother is taken from her over-heated tent-bed and well bathed in the open air with plenty of cold water. If she has escaped other ill effects of the treatment this proceeding often gives rise to a chill to be followed by lung or other troubles.

Immediately after birth, the child is well bathed with cold water, its limbs are pulled about with the idea of straightening them. Turmeric is placed upon and around the remnant of the umbilical cord. It is almost stifled by cloths thrown over its face for the purpose of excluding the pernicious "cooking smell." It is for three days dosed with honey and water, and not put to the breast. This custom often causes the mother much unnecessary suffering from accumulation of the milk.

It is the earnest hope of the educated of all nationalities in Rangoon and larger towns that the training of midwives should be vigorously pushed on, for it is fully recognized by the benevolent public that in this direction lies the only remedy for the great mortality and untold suffering among child-bearing women of this country.

Artistic professions.

230. The artistic professions are comprised in sub-orders 70 and 71. The stage was the means of support of 17,981 persons in all, the expression covering not only actors themselves, but the members of the orchestras which accompany the strolling troupes through the country. The total of these bandsmen remains at practically the same level as in 1891. That of actors has risen from 5,259 workers and dependents to 8,582, but the 1891 figures comprise the totals for exhibitors of puppets who were shown to the extent of 4,517 under a separate head in 1891. Painters with their dependents have fallen in number from 5,701 to 4,637 and sculptors, *i.e.*, the makers of stone and marble images of Gaudama, from 1,940 to 792.

Tattooers.

231. Professional tattooers numbered 986 actual male workers. In the original list of occupations circulated by the Census Commissioner no special provision was made for tattooers. The professors of this branch of the pictorial art are, however, so numerous in Burma that I recommended their being specifically shown, and in his revised list the Census Commissioner arranged for their entry under a separate number. Nearly every Burman male is tattooed from the knee to waist. The practice is undoubtedly one of long standing. It is possibly of Polynesian origin. Both the Samoans and the Kyans, a tribe closely allied to the Dyaks of Borneo, are said to decorate this portion of the body. An account of the River Barram given in the *Journal of the Indian Archipelago* (Singapore, 1851), describe the women of the Kyans as being so adorned. In Burma the ornamentation is effected by means of a black pigment. The pattern, which is continuous, consists of animals, cats, monkeys, *chinthes*, and the like, each figure being separated from the surrounding figures by dotted tracery. This tattooing of the waist and adjoining members may be said to be considered indispensable as a sign of manhood among the Burmans and is usually effected shortly before or after the temporary assumption of the yellow robe. In other portions of the body the colour employed is ordinarily red, the designs (single figures enclosed within a dotted border) are isolated and ordinarily have a particular significance. Thus a quail, a parrot, or a cat tattooed in red on one side of the neck below the chin is reputed to act as a love charm ; a *galon* on the back of the hand renders, or should render, the bite of a poisonous snake innocuous ; a quail on the ankle is believed to have the same desirable effect. A cat on the forearm will protect the person decorated from hurt from sword, spear or gun, while the proper design on the biceps brings with it the convenient power of disappearing at will. Other charms are referred to in Chapter X of Part I of the *Upper Burma Gazetteer*. Under the Burmese *régime* tattoo marks were among the insignia of office. I have procured copies of a few of the designs so employed. A *to* or dragon on the knuckles of the right hand was the ordinary mark of the privates of the various infantry regiments ; cavalry troopers had cantering horses tattooed on their stomachs above the navel. The name of the regiment appears to have also been tattooed on to the body. Burmese women are not, as a rule, tattooed, though occasionally an eligible spinster will have a parrot done in red on her lower jaw if amorously inclined. The Aarkanese do not tattoo. Tattooing is common among several of the non-Burman races. With the Shans the portion of the body covered with black tattooing is even larger than with the Burmans. The Karens do not, as a rule, tattoo their thighs, but among the Red Karens every male had up till recent years a rising sun tattooed in red on the small of his back, while the Loilong Karen men ornament their chins with two black squares. The Chins of the Chin Hills proper do not tattoo. In the country of the Southern Chins, however, all the women have their faces tattooed, and in many cases a female's personal charms are gauged by her tattooing. Among the Chinbôks the women's breasts are surrounded by a circle of dots. The men in these regions are not tattooed at all. The Chins of Northern Arakan also tattoo their women's faces and the same custom prevailed up to a recent date among the Kadus of the Katha district, who have otner points of similarity with the Southern Chins. It has been generally believed in the past that this tattooing of the fair sex was originally designed to make the women less attractive to raiders who might otherwise feel inclined to take them away from their homes for purposes of concubinage. Major Hughes does not, however, in his *Hill Tracts of Arakan* favour this theory.

According to this latter authority the Mros of the Hill Tracts occasionally tattoo a small mark or star on the cheek, forehead or breast, "with which they associate fecundity and various domestic virtues." Among the Kachins it appears to have been formerly the custom for the women to have a succession of rings tattoed on their legs between the ankle and the knee. The instrument used for tattooing is described by Mr. Ferrars in his *Burma* as having "a handle weighted at the butt and a long point of bronze, split like a ruling pen." The two-pronged instrument (*hnitkwazôk*) appears to be the one ordinarily used, but reference is made in Judson's Dictionary to an eight-pronged tattooing iron (*shithkwazôk*) with which apparently work proceeds more rapidly. No special diet is prescribed for the person to be operated upon, but, while tattooing is in progress, he is drugged with opium. The operator is always of the male sex. The 46 females returned as actual workers at the 1901 enumeration were probably merely their husbands'assistants. There are indications that the practice of tattooing is dying out among the Burmans. It is not now so frequently resorted to as in former days.

Clase G.—Unskilled labour not agricultural.

232. Class G embraces all non-agricultural occupations that require no special training or skill. It has been allotted only ten occupation numbers, but these include avocations as diverse as those of the tank-digger and the prostitute, and are represented by a total of 441,012 workers and dependents or 4·25 per cent. of the total population enumerated on the standard form of schedule. Its two orders are XXII, "Earthwork and general labour," and XXIII, "Indefinite and disreputable." We may, perhaps, congratulate ourselves on the fact that of these the second is numerically insignificant. Order XXII contains the bulk of the class G entries and the greater part of its representatives (392,654 workers and dependents) are found under the head "504, General labour," a term which comprised practically the whole of the class who returned themselves at the enumeration as coolies. The figure is higher than that returned under the corresponding head at the 1891 Census (227,628) but it would be unsafe to draw any conclusions of a general nature from this increase.

Class H.—Means of subsistence independent of occupation.

233. The last of the occupation classes (Class H) covers much the same ground as the latter half of Class G of 1891. To it belong beggars, pensioners, prisoners and the like who are dependent upon charity, the State or private income other than that derived from land. In Burma this class is naturally small. Were it not for the non-religious mendicants who subsist on alms and the convict population, its aggregate would be below ten thousand. As it is the 22,433 beggars, returned under number 513 "Mendicancy, not in connection with a religious order" and the 11,057 persons shown as "Prisoners convicted or in reformatories" raise the total to 41,522, or 0·40 per cent. of the population whose callings were recorded. The jail-population returned at the 1901 Census, including prisoners under-trial and prisoners for debt, is 11,322. This is much the same as the 1891 aggregate but is somewhat below what, according to the departmental figures, it should have been. It is probable that a portion of the jail population was returned under its previous occupations or as warders or the like and thus escaped being shown under occupation number 520.

SUBSIDIARY TABLE IX-A.

General distribution by occupation.

Class, order and sub-order.	PERCENTAGE ON TOTAL POPULATION.		PERCENTAGE IN EACH ORDER AND SUB-ORDER OF		PERCENTAGE OF ACTUAL WORKERS EMPLOYED	
	Persons supported.	Actual workers.	Actual workers.	Dependents.	In cities.	In rural areas.
1	2	3	4	5	6	7
I.—ADMINISTRATION.	1·4	0·4	32·52	67·47	13·93	86·06
1. Civil Service of the State	0·7	0·2	37·86	62·13	19·09	80·90
2. Service of local bodies	...	...	49·26	50·73	45·41	54·58
3. Village service	0·7	0·2	25·98	74·01	1·60	98·39
II.—DEFENCE.	0·32	0·24	74·35	25 65	29·34	70·65
4. Army	0·31	0·23	74·37	25·62	28·94	71·05
5. Navy and Marine	0·01	0·01	73·57	26·42	46·56	53·43
III.—SERVICE OF NATIVE AND FOREIGN STATES.	0·08	0·02	28·11	71·89	3·06	96·93
6. Civil officers	0·08	0·02	27·75	72·24	1·71	98·28
7. Military	...	...	75·00	25·00	68·75	31·25
TOTAL CLASS A, GOVERNMENT.	1·85	0·73	39·78	60·21	18·70	81·29
IV.—PROVISION, &C., OF ANIMALS.	0·93	0·56	60·22	39·78	3·10	96·90
8. Stock-breeding, &c.	0·86	0·53	61·52	38·47	3·00	96·99
9. Training, &c., of animals	0·07	0·03	44·82	55·17	4·70	95·29
V.—AGRICULTURE.	66·10	27·87	42·17	57·82	0·18	99·81
10. Landholders and tenants	6·92	2·78	40·20	59·78	0·22	99·77
11. Agricultural labourers	55·38	23·20	41·90	58·09	0·14	99·85
12. Growers of special products	3·72	1·85	49·77	50·22	0·52	99·47
13. Agricultural training, &c.	0·07	0·03	42·26	57·73	7·01	92·98
TOTAL CLASS B, PASTURE AND AGRICULTURE.	67·04	28·44	42·42	57·57	0·22	99·75
VI.—PERSONAL SERVICES.	1·00	0·67	66·69	33·30	34·50	65·49
14. Personal and domestic	0·86	0·5	68·70	31·29	22·65	77·34
15. Non-domestic entertainment ...	0·59	0·04	51·34	48·65	28·87	71·12
16. Sanitation	0·04	0·02	60·92	39·07	34·54	65·45
TOTAL CLASS C, PERSONAL SERVICE.	1·00	0·67	66·69	33·30	34·50	65·49
VII.—FOOD, DRINK, AND STIMULANTS.	9·52	5·01	52·64	47·35	8·36	91·63
17. Provision of animal food	2·16	1·01	46·76	53·23	5·12	94·87
18. Provision of vegetable food	5·26	3·03	57·57	42·42	12·88	87·11
19. Drink, condiments, &c.	2·08	0·96	46·31	53·68	7·58	92·41
VIII.—LIGHTING, FIRING AND FORAGE.	0·32	0·17	53·19	46·80	11·96	88·03
20. Lighting	0·09	0·05	56·28	43·71	11·00	88·99
21. Fuel and forage	0·22	0·11	51·97	48·02	12·37	87·62
IX.—BUILDINGS.	0·58	0·32	55·80	44·19	8·91	91·08
22. Building materials	0·14	0·08	56·61	43·38	6·44	93·55
23. Artificers in building	0·44	0·24	55·54	44·45	9·75	90·24
X.—VEHICLES AND VESSELS.	0·1	...	42·4	57·5	15·2	84·7
24. Railway, &c., plant	...	...	36·6	63·3	21·0	78·9
25. Carts, carriages, &c.	...	...	45·0	54·9	15·2	84·7
26. Ships and boats	...	...	39·7	60·2	15·5	84·4

SUBSIDIARY TABLE IX-A.

General distribution by occupation—continued.

Class, order and sub-order.	PERCENTAGE ON TOTAL POPULATION.		PERCENTAGE IN EACH ORDER AND SUB-ORDER OF		PERCENTAGE OF ACTUAL WORKERS EMPLOYED	
	Persons supported.	Actual workers.	Actual workers.	Dependents.	In cities.	In rural areas.
1	2	3	4	5	6	7
XI.—SUPPLEMENTARY REQUIREMENTS.	0·4	0·2	48·0	52·0	29·7	70·3
27. Paper	...	...	51·0	48·9	10·3	89·6
28. Books and prints	...	...	43·3	56·6	73·9	26·0
29. Watches, clocks, &c.	...	...	44·5	55·4	58·6	41·3
30. Carving and engraving	0·1	...	44·9	55·0	23·4	76·5
31. Toys and curiosities	...	...	59·7	40·2	46·8	43·1
32. Music and musical instruments ...	...	...	64·16	35·83	15·31	84·68
33. Bangles, necklaces, &c.	0·06	0·03	50·48	49·51	45·19	54·80
34. Furniture	...	...	50·54	49·46	64·80	35·19
35. Harness	0·01	...	45·18	54·81	44·57	55·42
36. Tools and machinery	0·07	0·03	51·37	48·62	7·64	92·35
37. Arms and ammunition	0·01	...	52·74	47·25	32·34	67·65
XII.—TEXTILE FABRICS AND DRESS.	4·04	2·90	71·74	28·25	10·90	89·09
38. Wool and fur	...	...	50·86	49·13	36·00	64·00
39. Silk	0·42	0·29	67·78	32·21	19·07	80·93
40. Cotton	2·44	1·92	78·40	21·59	4·24	95·75
41. Jute, hemp, &c.	0·09	0·05	56·93	43·06	7·70	92·29
42. Dress	1·06	0·63	59·43	40·56	27·52	72·48
XIII.—METALS AND PRECIOUS STONES.	0·91	0·41	45·08	54·91	21·59	78·40
43. Gold, silver, and precious stones ...	0·54	0·25	46·97	53·02	19·44	80·55
44. Brass, copper, &c.	0·03	0·01	44·70	55·29	14·37	85·62
45. Tin, zinc, &c.	0·05	0·02	46·36	53·63	50·06	49·93
46. Iron and steel	0·27	0·11	41·21	58·78	21·63	78·36
XIV.—GLASS, EARTHEN AND STONEWARE.	0·33	0·17	53·09	46·90	3·54	96·45
47. Glass and Chinaware	0·02	0·01	47·73	52·27	30·70	69·29
48. Earthen and stoneware	0·30	0·16	53·46	46·53	1·88	98·11
XV.—WOOD, CANES, AND LEAVES.	2·07	0·94	45·50	54·49	14·22	85·77
49. Wood and bamboos	1·53	0·65	42·69	57·30	16·98	83·01
50. Canework, matting, &c.	0·53	0·28	53·62	46·39	7·89	92·10
XVI.—DRUGS, GUMS, DYES, &c.	0·13	0·06	47·72	52·27	12·94	87·05
51. Gums, resins, &c.	0·05	0·02	43·67	56·32	9·67	90·32
52. Drugs, dyes, &c.	0·07	0·03	50·75	49·24	15·04	84·95
XVII.—LEATHER.	0·09	0·04	50·62	49·37	31·05	68·94
53. Leather, horn, and bones, &c. ...	0·09	0·04	50·62	49·37	31·05	68·94
TOTAL CLASS D, PREPARATION AND SUPPLY OF MATERIAL SUBSTANCES.	18·55	10·30	55·53	44·46	11·65	88·34
XVIII.—COMMERCE.	2·22	1·05	47·42	52·57	13·27	86·72
54. Money and securities	0·08	0·04	54·39	45·60	21·45	78·54
55. General merchandise	0·26	0·13	49·43	50·57	33·03	66·96
56. Dealing unspecified	1·55	0·75	48·44	51·55	6·48	93·51
57. Middlemen, brokers, &c.	0·31	0·12	38·91	61·08	30·53	69·46
XIX.—TRANSPORT AND STORAGE.	2·11	1·14	53·93	46·06	22·65	77·34
58. Railway	0·11	0·06	60·41	39·58	27·65	72·34
59. Road	0·76	0·35	45·75	54·24	17·97	82·02
60. Water	1·09	0·64	58·62	41·37	20·38	79·61
61. Messages	0·04	0·02	47·07	52·92	26·78	73·21
62. Storage and weighing	0·09	0·05	61·52	38·47	69·11	30·88
TOTAL CLASS E, COMMERCE, TRANSPORT AND STORAGE.	4·34	2·19	50·60	49·39	18·15	81·84

SUBSIDIARY TABLE IX-A.

General distribution by occupation—concluded.

Class, order and sub-order.	PERCENTAGE ON TOTAL POPULATION.		PERCENTAGE IN EACH ORDER AND SUB-ORDER OF		PERCENTAGE OF ACTUAL WORKERS EMPLOYED	
	Persons supported.	Actual workers.	Actual workers.	Dependents.	In cities.	In rural areas.
1	2	3	4	5	6	7
XX.—LEARNED AND ARTISTIC PROFESSIONS.	2·53	1·29	51·28	48·71	11·62	88·37
63. Religion	1·48	0·84	57·10	42·89	12·34	87·65
64. Education	0·12	0·05	46·90	53·09	11·83	88·16
65. Literature	0·02	0·01	39·15	60·84	5·41	94·58
66. Law	0·07	0·02	28·87	71·12	17·25	82·74
67. Medicine	0·47	0·18	40·36	59·63	8·58	91·41
68. Engineering and survey	0·08	0·04	48·48	51·51	8·09	91·90
69. Natural science	...	...	55·83	44·16	3·63	96·36
70. Pictorial art, &c.	0·08	0·03	41 43	58·56	15·72	84·27
71. Music, acting and dancing	0·17	0·09	51·49	48·50	10·84	89·15
XXI.—SPORT.	0·01	...	50·56	49·43	19·84	80·15
72. Sport	...	...	48·79	51·20	2·97	97·02
73. Games and exhibitions	0·01	...	51·51	48·48	28·45	71·54
TOTAL CLASS F, PROFESSIONS.	2·54	1·30	51·28	48·71	11·67	88·32
XXII.—EARTHWORK AND GENERAL LABOUR.	4·20	2·29	54·61	45·38	9·71	90·28
74. Earthwork, &c.	0·41	0·25	61·42	38·57	2·82	97·17
75. General labour	3·78	2·04	53·86	46·13	10·57	89·42
XXIII.—INDEFINITE AND DISREPUTABLE OCCUPATION.	0·05	0·03	70·93	29·06	26·69	73·30
76. Indefinite and disreputable	0·05	0·03	70·93	29·06	26·69	73·30
TOTAL CLASS G, UNSKILLED LABOUR, NOT AGRICULTURAL.	4·25	2·33	54·81	45·18	9·98	90·01
XXIV.—INDEPENDENT.	0·40	0·30	76·26	23·73	17·14	82·85
77. Property and alms	0·25	0·18	72·10	27·89	10·33	89·66
78. At the State expense	0·14	0·12	83·41	16·58	27·25	72·74
TOTAL CLASS H, MEANS OF SUBSISTENCE INDEPENDENT OF OCCUPATION.	0·40	0·30	76·26	23·73	17·14	82·85

SUBSIDIARY TABLE IX-B.

Proportion of Partially Agriculturists in each Occupation Class.

Occupation class.	Total of partially agriculturists.	Percentage of partially agriculturists to total of class.
A.—Government	5,050	2·6
B.—Pasture and agriculture	1,628	...
C.—Personal services	1,058	1·0
D.—Preparation and supply of material substances	27,895	1·5
E.—Commerce, transport and storage	6,131	1·4
F.—Professions	1,708	0·7
G.—Unskilled labour not agricultural	3,779	0·9
H.—Means of subsistence independent of occupation	275	0·7
Total ...	47,524	0·5

G. B. C. P. O.—No. 6, Supdt., C. O., 31-7-1902—1010.

APPENDIX.

Extracts from the Reports of Deputy Commissioners and Presidents of Municipalities.

APPENDIX A.

Extracts from the Reports of Deputy Commissioners and Presidents of Municipalities.

From L. H. SAUNDERS Esq., I.C.S., Officiating Deputy Commissioner, Akyab, to the Superintendent, Census Operations, Burma,—No. 1181C., dated the 15th April 1901.

WITH reference to your Circular No. 24 of 1901, I have the honour to forward herewith a brief report on the Census operations just completed in the Akyab district.

(*a*) The general register of villages (Appendix A) was prepared by Township Officers with the assistance of circle thugyis and revenue surveyors, and submitted to the district office. On receipt of these, circle lists were prepared and issued, with the printed instructions for Charge Superintendents and Supervisors. The Akyab, Pauktaw, Myohaung, Minbya, Kaladan, and Naaf townships each formed one charge, the Urittaung township (which includes the Mingan plague camp charge) was divided into four, and the Rathedaung township into two charges.

(*b*) *House-numbering.*—House-numbering commenced about the 15th of October throughout the district and was completed by the end of November. * * * The numbers were for the most part marked on small pieces of wood hung up under the eaves of the houses. In parts of the Kyauktaw subdivision the idea prevailed that these numbers brought fever with them, and they were accordingly hung up on trees or struck in the ground as far from the house as the owner would vanture to put them, having regard to the risk incurred in disobeying orders.

(*c*) *The agency employed* in each of the subdivisions of the district was as follows:—

Subdivision.	Number of Charge Superintendents.	Number of Supervisors.	Number of Enumerators.
Akyab	3	63	749
Pauktaw	5	86	1,000
Rathedaung	3	124	842
District Total ..	11	273	2,607

* * * * *

The agency employed, excluding a few private individuals, was practically entirely official, consisting of Myoôks and their clerks, Inspectors of Land Records, circle thugyis. revenue surveyors, *ywathugyis,* and a few members of the Police force.

* * * * *

(*d*) *The preliminary enumeration* was started in the Akyab and Pauktaw subdivisions and in the Naaf township of the Rathedaung subdivision about 15th January 1901. It commenced in the Rathedaung township about the beginning of February. * * * The enumeration was completed in the Naaf township by the end of January, and in the other townships by the middle of February. * * * The introduction of the *ywathugyi* system in place of administration by *taikthugyis* has not facilitated census work, the village headmen being naturally inferior to the circle headmen in point of intelligence and education while the number of officials with whom the Township Officer has to deal directly has increased very largely and thereby increased his work. Village headmen are not subordinate to revenue surveyors, the class from which the Supervisors were mostly drawn, and these surveyors therefore do not make as good Supervisors as the *taikthugyis.*

(*e*) *The final enumeration* took place on the night of the 1st March 1091. * * * The Subdivisional Officer, Akyab, brings to notice the good work performed by Maung Pan Hla, Township Officer, Akyab.

* * * * *

The Subdivisional Officer, Rathedaung, selects the three Charge Superintendents of his subdivision, namely, Maung Aung Zan, Inspector of Land Records; Maung Kyaw Zan U, and Maung Pa Taw U, Township Officers of Rathedaung and Maungdaw, respectively.

(f) Preparation of the district, charge, and circle summaries, &c.—The provisional figures for each charge were received from Township Officers and other Charge Superintendents between the 4th and the 9th March. The district totals were compiled on the 9th idem

APPENDIX.

Extracts from the Reports of Deputy Commissioners and Presidents of Municipalities.

(8) As I have already said, I am of opinion that the Census enumeration has been well done, and I am satisfied with the work.

* * * * *

(9) In conclusion I have only to add that I have had the greatest assistance from all my officers.

From A. G. COOKE, Esq., I.C.S., Officiating Deputy Commissioner, Kyaukpyu, to the Superintendent, Census Operations, Burma,—No. 707-14—01, dated the 1st May 1901.

As requested in your Circular No. 24 of 1901, I have the honour to report as follows on the results of the Census operations recently undertaken.

(*a*) The preparation of the general register of village was ordered on the 15th May 1900. The Township Officer, Ramree, completed the work about the end of the same month and the register for the An township was the last, not being completed till the end of August. The register for Kyaukpyu town was examined by the Superintendent, who revised it. The register for rural tracts was compared by the Deputy Commissioner with the district map and the jurisdictions of each Census circle fixed.

* * * * *

From the copies of the register kept up to date in the District office circle lists were prepared and, with maps, were issued to the Charge Superintendents on the 3rd November 1901.

* * * * *

(*b*) *House-numbering* was first commenced in the Ramree township (20th November 1900). The work was completed on the 2nd December 1900. The township which was latest in completing the numbering of houses was Kyaukpyu, the date being the 14th January 1901.

* * * * *

(*c*) *The agency employed.*—The number of Charge Superintendents was nine, distributed according to townships as follows:—

Cheduba and An, Township Officers only	2
Ramree and Kyaukpyu, Township Officers and Inspectors of Land Records	4
Myebôn, Head Constable and Inspector of Land Records	2
Kyaukpyu Town, Vice-President of Municipality	1
Total ...	9

The total number of Supervisors was 160 and there were 1,397 Enumerators.

Almost all the circle thugyis and clerks were appointed Supervisors.

The Enumerators were for the most part village headmen, but as a large percentage of these officials are illiterate, or nearly so, either the Charge Superintendents or Supervisors had to do most part of the Enumerators' work.

(*d*) The preliminary enumeration was commenced in all township on the 15th January 1901, except in Cheduba, where it was a day later. The work was completed first in An (18th January 1901) and last in Ramree, being on the 20th February 1901. To simplify matters, enumeration schedules were stitched into books in the District office and transmitted to Supervisors through Township Officers for distribution to enumerators.

The Deputy Commissioner tested the work in 16 villages and the Township Officers in 427 villages. (The Deputy Commissioner also checked many between the 14th February, when the periodical returns ceased, and the 28th.)

There were no *special* difficulties at this stage of the operations, except the apathy of the Supervisors, who failed to instruct their Enumerators, and the illiteracy of most of the latter.

* * * * *

(*e*) *Final enumeration.*—From the many corrections in red and additions in the enumeration books, I am inclined to think that endeavours were made to have the final enumeration as complete as possible.

The Township Officer, Kyaukpyu, specially commends the work of the joint Charge Superintendent, Maung Tha Hla, Inspector of Land Records.

The Township Officer, Ramree, mentions several names, but specially commends the work of Supervisors Maung Shwe Sun, Advocate, and Maung Lun Aung, Merchant. He also brings to notice the good work done by Supervisors Maung Chit Shwe and Maung Kein, thugyis respectively of the circles of Sagu and Ledaung.

The Township Officer, An, commends the work of Supervisor Maung Tha Dun of Dalet.

I have to bring to special notice the good work done by Maung San Aung and Maung Tun Hla U, Township Officers of Kyaukpyu and An respectively.

* * * * *

(*f*) All Township Officers were ordered to send in their charge and circle summaries so as to reach headquarters early on the 5th March 1901 and, if necessary, to employ special messengers.

The checking of the circle summaries with the circle lists and with the totals in the charge summaries in the manner laid down in paragraph 6, Chapter XII, of the Code of Census Procedure was commenced on the 3rd March with the summaries, &c., received for Kyaukpyu town and township. This was continued from day to day as summaries, either complete or not, came in from other townships.

On the night of the 7th March the summaries were complete, except for three circles of the Myebôn township, and, in order not to further delay the telegram ordered in paragraph 7, an estimate, given by the Township Officer, Myebôn (2,000 souls), for the three remaining circles was adopted and the telegram sent by steamer to Akyab the next morning to be wired from there, there being no telegraph Office here.

* * * * *

(*g*) *The operations in non-synchronous areas.*—The Poko Chin tract, situated in the north part of the Dalet *chaung* and comprising an area of 144 square miles approximately, was non-synchronously enumerated. On the 20th February 1901 the Township Officer, An, proceeded to Poko and, with the aid of the headmen or *Taungmins* of the two tribes inhabiting the tract, he enumerated the inhabitants. At the last Census the Poko Chins were returned as 508 against 425 at the recent Census.

* * * * *

(*h*) There were no prosecutions under the Act. The attitude of the people is reported to have been quiet.

* * * * *

(*j*) I believe that the figures obtained were fairly correct * * *

(*k*) *Vital statistics* are registered by the village headman and their work is reported to be fairly accurate. The only epidemic was cholera in 1894, when 2,072 deaths were registered as due to the epidemic alone. It is believed that the number registered was a small percentage of the number of deaths which actually took place. On the occurrence of cholera villages were abandoned and corpses were left lying about. These cases of course escaped registration.

* * * * *

From Major A. B. PRITCHARD, Deputy Commissioner, Sandoway, to the Superintendent, Census Operations, Burma,—No. 809-1—00, dated the 4th April 1901.

WITH reference to your letter No. 223-51 C.O. (Circular No. 24 of 1901), dated the 18th January 1901, I have the honour to report on the Census operations of this district for the year 1901 as follows:—

* * * * *

(*a*) The preparation of the map and general village register were completed and forwarded to you by the 23rd July under cover of this office letter No. 1411-1—00.

Copies of this map for each charge and circle, and circle and charge lists, were prepared by the District Surveyor working in this office and forwarded by the 15th of October 1900 to the different Township Officers for distribution to the Charge Superintendents working in their townships.

Forty specimen schedules were issued on the same date (15th October 1900) to the Township Officers for distribution to 40 Enumerators, and these were returned by the second week of November and in due course forwarded to you.

House-numbering.—On receipt of your letter No. 24-11C.O., of 24th September 1900 (Circular No. 10 of 1900), the necessary instructions were issued to Townships Officers to start the work of house numbering. The dates on which this work was begun and completed are shown below.

	Begun.	Completed.
Sandoway township	21st October 1900 ...	11th November 1900.
Sandoway town	24th October 1900 ...	1st November 1900.
Taungup township	10th November 1900...	24th November 1900.
Gwa township	2nd November 1900 ...	26th November 1900.

* * * * *

(*c*) *Agency employed.*—The Charge Superintendents employed in district and town were all Government officials and nine in number. * * *

The Supervisors were 76 in number (including 11 in the town) and consisted of 10 thugyis, 10 surveyors, 19 clerks, 10 traders, 10 village headmen, 4 pensioners, 4 cultivators, 5 teachers, and 4 sergeants of Police. * * *

There were 628 Enumerators, 588 being in the district and the remainder in the town and were drawn, from the cultivating class 198, *ywathugyis* 158, *se-ein-gaungs* 143; traders clerks, process-servers, office peons and *yasawutgaungs* constituted the remainder.

* * * * *

(*d*) *The preliminary enumeration.*— * * * Dates of commencement and completion of preliminary enumeration are given below.

		Commenced.	Completed.
Sandoway township	Charge No 3	13th January 1901 ...	20th February 1901.
	Charge No. 4	20th December 1900 ...	31st January 1901.
Sandoway town		1st February 1901 ...	13th February 1901.
Taungup township		15th January 1901 ...	15th February 1901.
Gwa township		15th January 1901 ...	14th February 1901.

* * * * *

(*e*) *The final enumeration.*—The final Census on the night of 1st March came off without a hitch. Many officials showed a creditable interest in the work. The Superintendents and Supervisors were all out on that night checking and helping their Enumerators.

Boat enumeration and enumeration of travellers began on that night too and was carried on up to the 3rd in distant places and the figures for these were incorporated in their respective charge summaries. The schedules in the case of the British India Steam Navitions steamer *Karagola*, which were given out to the master at Kyaukpyu, were collected here.

* * * * *

The following Charge Superintendents, Supervisors, and Enumerators have been selected for special commendation:—

Charge Superintendents.

Maung Tha Aung, Myoôk, Gwa.
Maung Kin, District Surveyor.
Mr. Godfrey, Superintendent of Land Records.
Maung Kyaw Min, *Akunwun.*

Supervisors.

Maung Shwe Tha, Sergeant of Kyeintali.
Maung Ta Daing, Clerk, Gwa Myoôk's Court, for helping to prepare charge summaries.
Maung Shwe O, Thugyi of Lintha.
Po Kin.
San Baw.
Shwe Daik.

Enumerators.

Maung Kyaw of Shwenyaungbin.
Maung Shwe Bye } of Kinmaw.
Maung Myat Pu }
Maung Shwe Yin of Peindawgale.
Maung Si Laung of Pazunpye.
Maung Aung Min of Kyaiktaw.
Maung Tha Nu of Sandoway.
Maung Ba Thin, clerk.
Maung An of Sandoway.

(*f*) The enumerators' abstracts were all more or less prepared on the morning of the 2nd March after the taking of the final census. These abstracts were checked with the schedules by the Superintendents and Supervisors and the whole finally submitted to the district office by the 6th March * * * The district totals were then made out and the result telegraphed to you and the Commissioner of Census, Calcutta, so as to reach by the 7th * *

(*g*) There was no non-synchronous census record for this district. * * *

(*h*) There were no prosecutions sanctioned under the provisions of the Census Act.

* * * * *

(*i*) The expenditure incurred on account of transmitting the Census paper and schedules to the Charge Superintendents and by them to the District office was Rs. 104-12-0. * *

(*j*) The result of the census in this district may be accepted as fairly correct.

(*k*) The vital statistics for the past ten years ending December 1900 show 30,107 births and 19,342 deaths.

* * * * *

From W. H. A. St. J. LEEDS, Esq., I.C.S., President, Rangoon Municipality, to the Superintendent, Census Operations, Burma,—No. 215-23, dated the 27th May 1901.

I have the honour to submit the following report in connection with the Census operations in Rangoon.

2. As in 1891, the Municipality was divided into 13 Census charges, corresponding with the Municipal Revenue circles. The same division of the Municipality is adopted in the Health Department for the purpose of vital statistics. The Census charges and Charge Superintendents were as follows :—

North Kemmendine,—Maung Shwe Po.
South Kemmendine,—Mr. G. E. Wales.
Lanmadaw,—Maung Po Tsi.
Tarôktan,—Mr. P. M. Burke.
North-west Town,—Mr. A. M. Minus.
North-east Town,—Mr. A. Malcolm.
South-west Town,—Mr. H. A. Nelson.
South-east Town,—Mr. I. Cowling.
Kungyan,—Dr. B. Dey.
Botataung and Yegyaw,—Mr. J. E. Moultrie.
Theinbyu,—Captain Williams.
Dallah,—Maung Po Saing.
Tamwè,—Mr. G. W. Mundy.

* * * * *

Mr. Burke, Superintendent of Police, undertook the Census work in the Chinese quarter, Tarôktan, which is the most difficult quarter to deal with. I desire to especially bring his services to favourable notice, as they were of the utmost value. My thanks are also due to the gentlemen unconnected with the Municipality, who undertook the duties of Charge Superintendent.

3. Some of the forms prescribed for Census work in the district and places other than Rangoon could not be used without amendment in Rangoon, and it was decided, after discussion with yourself, to make any alterations that might be considered necessary without interfering with the nature of the final enumeration and returns. * * *

4. House-numbering commenced in December 1900 and was mostly completed by the 12th January 1901. In some charges the work took far longer than in others. In Lanmadaw it was completed by the 29th December, while in Botataung and Yegyaw some houses were found to be unnumbered on the 20th February when the preliminary Census was being taken. In most of the charges the numbering had been completed by the 12th January. Each tenement was given a separate number, as in 1891, and servants' quarters were numbered as distinct from the houses to which they belonged. * * * On the completion of the numbering the circle lists and house lists were prepared and then each charge was thoroughly inspected by the Municipal Secretary, who made a report to me of the results of his inspections. In all 23 inspections were made of the various charges, in addition to special inspections of the Census work at mills and at certain places where it was found the work was not being done in a satisfactory manner. It would appear that the most satisfactory definition of a Census house in Rangoon would be a tenement.

5. In the taking of the Census the Municipal Secretary acted, as in 1891, as General Superintendent. The agency employed in taking the Census consisted of—

13 Charge Superintendents.
100 Circle Supervisors.
950 Enumerators (the services of nine men being dispensed with after house-numbering).

Of these—

1 Superintendent was paid.
12 Superintendents were unpaid.
14 Supervisors were paid.
86 Supervisors were unpaid.
564 Enumerators were paid.
386 Enumerators were unpaid.

The rates of pay were—

Superintendents,—Rs. 100.
Supervisors,— „ 30.
Enumerators,— „ 20.

Three Enumerators, however, were paid only Rs. 15 each, as they were reported for giving trouble, and nine men were paid at reduced rates ranging from Rs. 10 to Rs. 5

Of the Superintendents—

8 were Municipal servants } unpaid.
4 were Government servants }
1 was a Master at the Rangoon College—paid.

Of the Supervisors—

27 were Municipal servants } unpaid.
59 were Government servants }
14 were outsiders—paid.

Of the Enumerators—

49 were Municipal servants } unpaid.
228 were Government servants }
109 were sent from the Census Office }
128 were teachers and school boys } paid.
436 were outsiders }

The Superintendent of the South-east Town Census Charge, whose substantive appointment was Chief Clerk of the Municipal Engineer's office, was placed on special duty for two months in connection with Census work, and a clerk on Rs. 70 was employed for nearly three months.

It was hoped that far more Government clerks would have been made available for Census work and 291 must be a small proportion of the total available for such work in Rangoon. There is no doubt that Census work is unpopular with this class, although it was not really heavy and liberal holidays were given as a reward. It would be advisable if the Government orders could be stricter on the occasion of a Census being taken in the future as, in some cases, the heads of offices seemed to scarcely realize the urgency of the claim upon the services of their establishment. * * *

6. Preliminary enumeration was commenced in most charges by the 1st February and was completed throughout the Municipality, excepting the mills, by the 20th February.

The following work was done in testing. On the 18th and 19th February I, in company with the Municipal Secretary, inspected a large number of the Enumerators' schedules and visited all the Census charges and inspected the work on the spot. In accordance with a circular issued, all the Enumerators attended, as directed, at the Jubilee Hall on the 20th and 21st February, and every book of schedules was inspected as far as possible. This checking in the presence of the Charge Superintendents and Supervisors enabled them to carry out a further and complete check if they wished to do so. The work was exceedingly laborious, but the result proved that it was absolutely necessary. At future preliminary enumerations it would be advisable to devote more than two days to checking the work done. Four days would be well employed in this work.

The usual mistakes, due to stupidity or ignorance, were met with as largely as ever. Some Enumerators showed Native Christians as Christians in column 4 and Hindus in column 8, and it was a common thing for a sect to be given for a religion. It was difficult to make the majority of the Enumerators understand column 11 (Means of subsistence of dependents on actual workers) and it would appear that the heading to the column could in future be amended with advantage. Columns 14 and 15 gave a considerable amount of trouble and they appear to be unnecessarily complicated. It would appear to be simpler to have one column only, headed "Language he or she can both read and write."

As regards castes no claim to accuracy can be made as to the returns. It will never be possible to obtain accurate returns of Hindu castes in Rangoon. Few of the Enumerators know much about castes and a large proportion of the Hindus enumerated appear to know less. Some trouble was taken to get a correct list of the principal Madras castes from well-educated Madrassis, and after the list had been compiled it was found from a reference to the Madras Census Authorities that most of the names given were not the names of castes at all. The best possible was done under the circumstances. * * *. As the caste returns in Rangoon must always be inaccurate and, therefore, useless, and as an immense amount of time is wasted in obtaining them, it would be of great advantage if no enumeration of castes were attempted in future. Sample schedules were printed and distributed, and proved of great use in the preliminary enumeration.

7. The final enumeration calls for no particular comment. * * * I am of opinion that the Census returns are accurate.

No house schedules or private schedules were used within Municipal limits, and none were required or asked for, although it was publicly advertised that anybody requiring these schedules could have them. There is no necessity for using these schedules in Rangoon, as all classes of the people are accustomed to having the Census taken by Enumerators, and prefer giving the requisite information to one of them to taking the trouble to understand and fill up schedules themselves. Under these circumstances, and as time is saved and accuracy is gained by having the entire Census taken by Enumerators, there does not appear to be any necessity for having private or house schedules in Rangoon at all.

8. In accordance with a Circular letter, dated the 23rd February, the Superintendents, Supervisors, and Enumerators attended at the Jubilee Hall on the 2nd March, commencing at 7 A.M. Papers of instructions were given to the Superintendents and Supervisors, and the Municipal Secretary exercised a general supervision over the preparation of the provisional totals. The provisional totals from the Port, the Railway, the Military authorities, the Jail, and Lunatic Asylum were received at the Jubilee Hall during the day. The Railway authorities gave their totals according to the Municipal charge division. The grand total was telegraphed to the Census Commissioner at 8-40 P.M.

9. The Census at the 51 mills in Rangoon was taken by the agency provided by the owners. Considerably less trouble was experienced on this occasion than in 1891. At the last Census the Charge Superintendents in some cases did not get in touch or work in harmony with the Mill Census officers. On this occasion the Municipal Secretary personally visited every mill and instructed the Enumerators and helped them where necessary. Some mills were visited three or four times by the Secretary, and in addition the Charge Superintendents visited most of them. * * * I am happy to be able to report that, except in one case, a mill owned by a Mussalman and managed by a Eurasian,

not the slightest difficulty was experienced at the mills, and thanks are due to the firms who so readily and cheerfully performed an onerous public duty with great success at a time when the milling season was at its height.

In paragraph 2 I have already mentioned Mr. Burke, Superintendent of Police, for special commendation. Captain Williams, Health Officer, and Messrs. Wales, Nelson and Vinton also did good work, while I consider the thanks of Government are due to Mr. Short for his able and energetic supervision throughout the operations. His experience, acquired during the Census of 1891, proved of great value, and no doubt materially conduced to the work being smoothly and efficiently performed.

10. The total cost of the Census operations has been—

	Rs.	A.	P.
Remuneration of Charge Superintendent	100	0	0
Remuneration to 14 Supervisors @ Rs. 30	420	0	0
Remuneration to 552 Enumerators @ Rs. 20	11,040	0	0
Remuneration to 3 Enumerators @ Rs. 15	45	0	0
Remuneration to 1 Enumerator @ Rs. 10	10	0	0
Remuneration to 8 Enumerators @ Rs. 5	40	0	0
Office establishment	1,067	5	6
General contingencies	3,868	3	3
	16,590	8	9

* * * * *

From G. G. COLLINS, Esq., Deputy Commissioner, Hanthawaddy, to the Superintendent, Census Operations, Burma,—No. 205-13—1, dated the 14th June 1901.

I HAVE the honour to report on the Census operations in this district as follows:—

(*a*) The general registers of villages and towns were drawn up in the headquarters office from reports received from circle thugyis and revenue surveyors. In most cases the numbers of houses were under-estimated in these reports, but all villages were included.

(*b*) House-numbering was started about the 1st October and completed about the 1st November. No difficulty was experienced in the course of the work.

(*c*) The agency employed was—

Charge Superintendents; all of them Inspectors of Land Records.

Supervisors, 150; these men were circle thugyis, *thugyisayes*, and revenue surveyors of the Land Records.

Enumerators, 3,527, for all villages and hamlets; these were *ywathugyis* and *sè-ein-gaungs*; for the mills, the managers or clerks of the mills.

(*d*) Preliminary enumeration started about the 12th December 1900 and was completed about the 1st January 1901. A good amount of testing was done and the Deputy Commissioner, Subdivisional Officers, and Township Officers checked a portion of the work, which proved useful; serious mistakes, however, were exceptional and rectified where found; the result generally was satisfactory. No special difficulty of any kind was experienced.

(*e*) The final enumeration was well performed; all officers worked well. The following may be specially mentioned:—

Maung Paw Htun, Subdivisional Officer, Twante.

Maung Lu Gale, Township Officer, Twante.

Mr. Pereira, Chief Clerk of my office, gave very great assistance in entering and correcting mill schedules and Mr. Sarfas, Headquarters Assistant, gave useful help.

Mr. Torrens practically superintended the District Census staff, which, as shown above, was connected largely with his own department; he gave much time and labour to the work and deserves particular mention.

(*f*) For the preparation of the district, charge, and circle summaries, the following plan was adopted:—

Enumerators went to the headquarters of their Supervisors on the 2nd March, the Supervisors after having abstracted their results went to the headquarters of their Charge Superintendents on the 3rd March, and the Charge Superintendents in their turn brought their abstracts to the District headquarters on the 5th March. The plan worked well and all Enumerators, with the exception of two or three, were up to time. The provisional totals were wired to India on the 7th March.

(*g*) There are no non-synchronous areas in the district.

(*h*) No prosecutions under the Act were made. The attitude of the people was favourable and information was readily given.

(*i*) The total cost of the operations was Rs. 30-5-0.

(*j*) I consider that the results obtained are satisfactorily correct.

(*j*) *The correctness or otherwise of the results obtained.*—The results obtained are as correct as can be expected, considering the scope of the work and the classes from which Enumerators have to be drawn.

* * * * *

(*l*) *Emigration and immigration.*—There has been little emigration from the district, but a very large immigration.

There has been a large influx of natives of India, principally from the Madras Presidency, and large villages almost solely composed of such persons have sprung up.

The flow of population from the Upper Province has gone on increasing from year to year. Upper Burmans come down at the ploughing and reaping seasons, engage themselves as field labourers, and finally settle down permanently. Large areas which 10 years ago were forests are now under cultivation.

* * * * *

From the President, Pegu Municipal Committee, to the Superintendent, Census Operations, Burma,—No. 340, dated the 3rd April 1901.

WITH reference to Circular No. 24 of 1901, dated the 18th January 1901, I have the honour to report as follows:—

(*a*) The circle list was prepared by dividing each of the 17 wards in the town into a convenient number of blocks, numbering 72 in all. These blocks were then grouped into six circles, each in charge of a Supervisor, and the whole town formed a separate charge under one Charge Superintendent. The general register and circle list were prepared in the Municipal office in accordance with the above arrangements.

(*b*) *House-numbering.*—House-numbering was commenced on the 26th November 1900 and concluded on the 15th December 1900. * * *

(*c*) *The agency employed.*—One Charge Superintendent, Headquarters Assistant Commissioner; 6 supervisors, comprising 2 Myoôks, 1 Municipal Secretary, 1 Excise Superintendent, and the Chief Clerk and Head Judicial Clerk of the Deputy Commissioner's office; 72 Enumerators, principally clerks from Government offices and ward headmen, 2 Police officers, some school-masters, and the Court interpreter were appointed.

(*d*) The preliminary enumeration was commenced on the 1st February and completed by the 15th. * * *

(*e*) The final enumeration was conducted in an entirely satisfactory manner between 7 P.M. and midnight on the 1st March 1901. In most of the circles the work was over at an earlier hour owing to the great assistance rendered by the inhabitants, who stayed in their houses with lights burning. No night bazaar was held, the streets were practically deserted, hackney-carriages did not ply, and the absolute stillness and quietude of the town, even at an early hour of the evening, was a remarkable and impressive feature. * * *

(*f*) The charge and circle summaries were prepared in strict accordance with Chapter XII of the Census Code. The charge summary was completed and submitted on the 4th March 1901.

(*g*) *Nil.*

(*h*) There were no prosecutions under the Act. The attitude of the people was all that could be desired. * * *

(*i*) The total actual cost of the operations was Rs. 15-7-0.

(*j*) I have no doubt as to the correctness of the results obtained, owing to the limited area, the large number of educated Census Officers available, and the facilities for constant supervision and check, which were fully utilized.

* * * * *

(*l*) *Emigration and immigration.*—There has been little emigration, but a considerable influx of natives of India from the Madras Presidency and of Burmans from the dry zone. * * *

Report on the Census operations, Tharrawaddy district. By W. N. Porter, Esq., Deputy Commissioner.

(*a*) The preparation of the general register for villages and towns was commenced on the 24th June 1900. It was first completed and submitted to this office by the 26th September 1900. It was then checked and found to be satisfactorily done, with the exception that in a number of cases blocks with 50 houses or slightly less were created. On the advice of the Census Superintendent the lists were returned to split up all blocks containing 45 to 50 houses into two.

* * * * *

Circle lists and maps were distributed from the District office on the 30th November 1900.

* * * * *

From N. S. FIELD, Esq., Deputy Commissioner, Pegu, to the Superintendent, Census Operations, Burma,—No. 439-1—91G., dated the 3rd April 1901.

IN compliance with your Census Circular No. 24 of 1901, dated Rangoon, the 18th January 1901, I have the honour to forward the report on Census operations in the Pegu district during the year 1901.

* * * * *

(*a*) *The preparation of the general registers of villages and towns and of the circle list.*—The general register of villages was prepared by the Subdivisional Officers in consultation with the Township Officers. The work was commenced on the 19th April 1900 and completed on the 14th July 1900.

From the above, circle lists were prepared by the Superintendent of Land Records together with the necessary maps, which were forwarded to the Charge Superintendents on the 26th November 1900.

* * * * *

(*b*) *House-numbering.*—House-numbering was commenced about the middle of November and completed by about the end of December.

(*c*) *The agency employed.*—The district was divided into ten charges, inclusive of the non-synchronous tract of Ananbaw, where the Charge Superintendent (the Township Officer) held the office of Charge Superintendent of the Ananbaw non-synchronous tract as well as that of the synchronous area.

There were therefore nine Charge Superintendents only appointed, comprising three Myoôks, five Inspectors of Land Records, and one Railway official.

* * * * *

There were 144 Supervisors and 1,703 Enumerators employed.

The Supervisors were mainly drawn from *taikthugyis*, revenue surveyors, and *thugyisayes*. The Enumerators were mainly drawn from village headmen, revenue surveyors and ten-house *gaungs*, with a few Police officers, subordinate forest officials, and non-official persons.

(*d*) *The preliminary enumeration.*—The preliminary enumeration was commenced on the 15th January 1901 and was completed in the Pegu subdivision in the first week in February and in the Nyaunglebin subdivision on the 25th February 1901. * * While the preliminary enumeration was in progress Subdivisional Officers, Township Officers, and Charge Superintendents were constantly on the move checking the entries.

* * * * *

(*e*) *The final enumeration.*—The final enumeration throughout the synchronous area was taken on the night of the 1st March. Both Mr. Pascal, Subdivisional Officer, Pegu, and Mr. Duff, Subdivisional Officer, Nyaunglebin, did excellent work.

* * * * *

(*f*) *The preparation of the district, charge, and circle summaries and the arrangements made for the early submission of data for the provisional totals.*—The instructions in Chapter XII, Census Code, were strictly complied with. Maung San Shwe, Superintendent of Land Records, who has supervised Census arrangements throughout under the orders of the Deputy Commissioner, was the gazetted officer placed in special charge for the purpose of computing district provisional totals. These were telegraphed on the 7th March.

(*g*) *The operations in non-synchronous areas.*—There was only one small non-synchronous tract in the district, comprising a portion of the Ananbaw circle lying in the hills in the north-west of the district and consisting of twelve villages only.

House-numbering was commenced and finished in December.

The preliminary enumeration was made betwen the 18th and 25th January, and the final enumeration began on the 18th and was finished on the 25th February.

Schedules and abstracts were received on the 1st March 1901.

* * * * *

(*h*) *Prosecutions under the Act and the attitude of the people towards the operations.*—There were no prosecutions under the Census Act.

The attitude of the people in general towards the operations was all that could be desired.

* * * * *

(*i*) *Total actual cost of the operations.*—The expenditure incurred is given below :—

	Rs.	A	P.
Pay of clerks assigned to Census duty, 29th January to 10th February ...	11	5	7
Postage	10	0	0
Telegrams	16	13	0
Freight on forms received from Rangoon	5	11	0
Cost of despatching schedules to Rangoon, inclusive of fare of clerk ...	4	7	0
Total ...	48	4	7

(*b*) House-numbering was commenced on the 15th November 1900 and completed on the 12th January 1901 in all charges except Zigôn town. The figures for that charge are—

Commenced on the 5th February 1901. | Completed on the 11th February 1901.

Check by district officials showed that the most prevalent errors were—

(1) that the numbering became faint and indistinct.

(2) that the numbers were too small.

* * * * *

(*c*) *Agency employed.*—There were employed 21 Charge Superintendents, 209 Supervisors, 2,643 Enumerators. At first it was thought that 12 charges would be sufficient in addition to the one Railway and three Municipal charges, and the General Register was compiled on that basis.

Subsequently it was necessary to form five additional charges.

* * * * *

Charge Superintendents included—

Eight Myoôks.	One Assistant Superintendent of Police.
One Subdivisional Officer.	Four Inspectors of Land Records.
One Deputy Conservator of Forests.	One Agent, Bombay Burma Trading Corporation.
One Deputy Inspector of Schools.	One Municipal Secretary.
One Superintendent of Land Records.	

Supervisors were principally drawn from the following classes—

Village headmen.	Clerks.
Revenue surveyors	Forest rangers (in forest tracts).
Ward headmen (in Towns).	*Ywathugyis.*

Taiksayès.

Enumerators were chiefly—

Village headmen.	Police officers.
Ten-house *gaungs.*	Traders.

Clerks.

(*d*) *Preliminary enumeration.*—This commenced on the 15th January 1901 and was not completed till the 22nd February 1901.

* * * * *

(*e*) I believe the final enumeration was extremely accurate. Few Census Officers slept on the night of the 1st of March. There was commendable activity and interest shown and I know of only one case in which culpable negligence was shown.

* * * * *

(*f*) *Summaries.*—The District Summary was commenced on the morning of the 4th March 1901 and the provisional totals telegraphed to Rangoon and Calcutta at about noon on the 6th March 1901.

The chief difficulty encountered was the absence of circle lists, which were in most cases not sent with the charge and circle summaries.

* * * * *

Provision was made for including the preliminary figures of the following charges :—

(i) Bombay Burma camp charge;

(ii) Tharrawaddy Reserve forest charge ; and

(iii) North Zamayi Reserve charge

in the provisional totals to be telegraphed to Rangoon and Calcutta, as it was feared that the final figures would not arrive in time. The final figures, however, arrived in time to be incorporated in all cases, except the North Zamayi Reserve.

* * * * *

(*h*) Two prosecutions were instituted under the Act.

(*i*) The expenditure on Census operations was as follows: —

	Rs.	A.	P.
Pay of Census Clerk, 2nd January to 15th March 1901, at Rs. 25 ...	61	4	8
Travelling allowance of Census Clerk	3	14	0
Travelling allowance of officers not deputed on special duty, but travelling solely for Census work	303	13	3
Total	368	15	11

* * * * *

(*k*) The following figures show the number of births and deaths recorded in this district for the past 10 years :—

* * * * *

Year.	Births.	Deaths.
1891	10,609	6,451
1892	9,069	7,620
1893	9,447	8,558
1894	8,941	7,004
1895	10,366	6,510
1896	10,946	9,162
1897	10,244	9,325
1898	10,176	9,317
1899	13,855	9,074
1900	13,899	8,491
Total ...	107,552	81,512

The natural increase according to the vital statistics available is therefore 26,040.

* * * * *

(*l*) Calculated from these figures the immigration for the district is—

Total increase for decade	48,428
Natural increase	26,040
Increase due to immigration	22,388

It is probable that these figures are too high.

A considerable immigration, however, exists, consisting of labourers who come to the district for harvest operations. These mostly return to their homes, but a considerable number remain, and in ten years a material increase in population is thereby effected.

From C. M. WEBB, Esq., I.C.S., President, Municipal Committee, Thônzè, to the Superintendent, Census Operations, Burma,—No. 82, dated the 16th May 1901.

WITH reference to Circular No. 24 of 1901, Census Department No. 223-51—C.O., dated the 18th January 1901, I have the honour to report as under.

(*a*) The general register of villages and the circle lists were prepared in the Municipal office under the control of the Deputy Commissioner, Tharrawaddy.

(*b*) House-numbering was started on the 18th October 1900, after full instructions having been given to all Supervisors and Enumerators by the Charge Superintendent, and completed long before the 15th November 1900. * * *

(*c*) There were only one Charge Superintendent, 17 Supervisors, and 80 Enumerators employed for Census work in the Thônzè Municipality. The *Akunwun* of Tharrawaddy was the Charge Superintendent, and all ward headmen of Thônzè Municipality were appointed Supervisors, and block elders or ten-house *gaungs* generally were employed as Enumerators. A few clerks and other private individuals were also selected as Enumerators.

(*d*) The Charge Superintendent gave instructions on the 13th January 1901 to the Supervisors and Enumerators to make them understand the Census rules thoroughly, and explained fully their duties to be performed, and distributed schedules and other requirements. The Enumerators were supplied with blank paper as well for preliminary enumeration and were directed not to copy the entries into schedules until they have been examined and corrected by the Supervisors under the supervision of the Municipal Secretary and passed by the Charge Superintendent. The work started punctually on the 15th January 1901. * * * The preliminary Census work was thoroughly examined and tested on the spot by the Charge Superintendent with the assistance of clerks from the Deputy Commissioner's and other offices on the 12th and 13th February 1901.

(*e*) The *Akunwun* with three of his clerks and the Municipal Secretary assisted the Supervisors and Enumerators in final enumeration and tested their work on the night of the 1st March 1901.

(*f*) On the morning of the 2nd March all Supervisors and Enumerators collected at the Thônzè Municipal office and did their work of checking and preparation of abstracts and circle summaries under supervision of the Charge Superintendent. * * * The charge and circle summaries with schedules and circle lists were submitted to the Deputy Commissioner, Tharrawaddy, on the morning of the 3rd March 1901.

* * * * *

(*h*) No prosecutions were made under the Act.

(*i*) The total cost of the operations, exclusive of the cost of forms, amounted to Rupees 9-15-3 only, being cost of paint and stationery.

(*j*) The statistics obtained were to my knowledge as accurate as possible and may be regarded as correct.

From MAUNG PO SI, President, Municipal Committee, Gyobingauk, to the Superintendent, Census Operations, Burma,—No. 71-10G., dated the 10th April 1901.

WITH reference to your Circular No. 24 of 1901, dated the 18th January 1901, I have the honour to submit a brief report on the Census operations.

(*a*) The general register of the town and the circle lists have been prepared in accordance with the instructions contained in Circular No. 7 of 1900 and completed on the 31st August 1900. * * *.

(*b*) The house-numbering was commenced on the 22nd November 1900 and completed on the 24th November 1900. * * *.

(*c*) During the time of Census operations, the agency employed consisted of a Charge Superintendent, who is the Secretary to the Municipality, five Supervisors, who are the ward headmen, and 35 Enumerators, who, most of them, are the block-elders appointed under the Lower Burma Towns Act.

(*d*) On the 15th January 1901 the preliminary enumeration was commenced and completed not later than the 19th January 1901. The testing of the work was thoroughly done by the Supervisors and the Charge Superintendent. * * *

* * * * *

(*f*) The charge and the circle summaries were prepared on the 2nd March 1901 and submitted to the Deputy Commissioner's office, Tharrawaddy, on the 3rd March 1901.

(*h*) There was no prosecution under the Act.

(*i*) No expenditure was incurred to the Municipality.

(*j*) The figures were correctly obtained.

* * * * *

From Captain F. H. ELIOTT, Deputy Commissioner, Prome, to the Superintendent, Census Operations, Burma,—No. 63-C.O.—1, dated the 10th April 1901.

I HAVE the honour to submit a brief report on the Census operations for the year 1901, as required by Census Circular No. 24 of 1901.

(a) The preparation of the general register of villages, of towns, and of the circle list.—General registers of villages were distributed to all Subdivisional and Township Officers for filling in columns 2 to 7 and to be returned by the 20th May 1900.

* * * * *

The abstract of the general village register of Prome district together with a Census map, prepared according to the rules laid down in Chapter II, was submitted on the 8th August 1900. The circle lists and maps were prepared in the Land Records Office and distributed to all Charge Superintendents on the 28th September 1900.

(b) House-numbering.—House-numbering was commenced and completed in the several townships on the following dates:—

Name of township.	Numbering commenced	Numbering completed.
Paukkaung and part of Hmawza ...	15th October 1900 ...	15th November 1900.
Thègôn and Paungdè	19th October 1900 ...	4th December 1900.
Shwedaung and part of Hmawza ...	10th October 1900 ..	27th November 1900.
Padaung	2nd October 1900 ...	29th October 1900.

* * * * *

(c) The agency employed.—There were four Charge Superintendents for the rural areas, 142 Supervisors, and 1,938 Enumerators, and none of these received any extra remuneration for their services.

Inspectors of Land Records filled the post of Charge Superintendent. Most of the Supervisors were *taiksayés* and Revenue Surveyors and the more literate *taikthugyis* and *ywathugyis*. Village headmen, *sè-ein-gaungs*, and village lay school-masters acted as Enumerators.

* * * * *

(d) The preliminary enumeration.—The dates on which the recording of the preliminary enumeration was commenced and completed are as under:—

Name of township.	Date commenced.	Date completed.
Paukkaung and part of Hmawza ...	15th January 1901... ...	23rd February 1901.
Thègôn and Paungdè	5th January 1901	26th February 1901.
Shwedaung and part of Hmawza ...	22nd January 1901 ...	2nd February 1901.
Padaung	9th January 1901	10th February 1901.

* * * * *

(e) The final enumeration.—Mr. W. J. Baker, Superintendent of Land Records, Prome, was appointed for the compilation of the District provisional totals. * * * He did excellent work throughout. * * * Maung Mya, Head Revenue Clerk, was appointed as Census Clerk from the 27th January. He worked hard and intelligently and deserves special mention. * * * Maung Wa and Maung Pe Po, officiating Myoôks under training, rendered good service in checking and helping the more backward Enumerators.

But the most deserving of all the men employed were the four Charge Superintendents—

(1) Maung Hmun,
(2) Maung Lu Gale,
(3) Maung Charley, and
(4) Maung Po Saing.

* * * * *

The Revenue surveyors and *thugyisayès* all worked well, with one exception.

The Subdivisional and Township Officers without exception all took a keen interest in the work.

* * * * *

(f) The preparation of the District, charge and circle summaries and arrangements made for the early submission of data for the provisional totals.—All Charge Superintendents * * * arrived at Prome by Monday, the 5th March.

* * * * *

All the enumeration books were re-checked in the Land Records Office as to totals, males and females, the circle summaries and charge summaries were all checked personally by Mr. Baker * * * and the figures were wired on the evening of the 6th March both to Calcutta and Rangoon.

* * * * *

(g) The operations in non-synchronous areas.—There were no non-synchronous areas in this district.

* * * * *

(h) Prosecutions under the Act, if any, and the attitude of the people towards the operations.—There were no prosecutions under the Act to report. The attitude of the people generally towards the Census has been of the usual passive kind.

* * * * *

(j) The correctness or otherwise of the results obtained.—All the Subdivisional and Township Officers report, after having been about a good deal checking the work, that there is no reason why the figures should not be considered accurate.

* * * * *

(k) Vital statistics.—The total number of deaths during the decade under report has been—

Males	... 44,017
Females	... 39,537
Total	... 83,554

The total number of births for the same period was—

Males	... 55,275
Females	... 51,845
Total	... 107,120

* * * * *

(l) Emigration and immigration.—That emigration must have taken place appears certain, the causes being (1) repeated scanty rainfalls and the attendant drawbacks to agriculture, particularly the year 1895-96, and (2) fear of cholera in the bad years of 1892, 1893, 1897, and 1899. Most of these emigrants have gone to swell the numbers in the delta districts.

* * * * *

Note on Census Operations in the town of Prome.

1.—Preparatory work.

(a) The general town register and circle lists were ready by the 27th August 1900. Each ward in the town was called a circle. * * *

(b) House-numbering.—House-numbering commenced on the 20th October 1900 and was completed on the 11th November 1900. * * *

(c) The agency employed.—All the Census officers engaged were unpaid. There were in all 1 Charge Superintendent, 11 Supervisors, and 213 Enumerators; of the Supervisors 6 were ward headmen, 2 Government thugyis, 1 a Municipal clerk (Maung Sein), 1 a Municipal schoolmaster (Maung Aung Dun), and 1 a Municipal tax-collector (Maung Po Lu); of the 219 Enumerators, 170 were block elders and the remainder Government and Municipal Clerks; Maung San Pe, Head Clerk, Municipal office, was Charge Superintendent.

II.—The Census.

(d) The preliminary enumeration commenced on the 15th of January 1901 and was completed on the 25th of February 1901. * * *

(e) The final enumeration.—No difficulty was experienced during the final enumeration, which commenced at 8 P.M. and was completed about 1 A.M. * * * The Census Supervisors and Enumerators worked well, but I specially wish to bring to notice the energy and zeal of Maung San Pe, Head Clerk, Municipal office, on whom, as Charge Superintendent, devolved the more arduous part of the work.

(f) The circle summaries were received on the 2nd and 3rd March 1901 by the Charge Superintendent, and, after check at the Municipal office, were forwarded with the charge summary to the office of the Superintendent of Land Records on the afternoon of the 4th March 1901.

(g) Nil.

(h) No prosecution under the Census Act was necessary and the attitude of the people was acquiescent and friendly.

(i) The total cost to the Municipality, * * * was Rs. 40-13-0.

(j) Having regard to the intelligence and close supervision of the Supervisors and of the Charge Superintendent, who had some experience of the work during the last Census, the results of the enumeration may be accepted as very approximately correct. * * *

(k) Vital statistics.—There has been no serious epidemic during the decade ending 1901. The number of births amounted to 7,067 and deaths to 7,082. * * *

From F. W. MARTIN, Esq., President, Paungdè Municipal Committee, to the Superintendent, Census Operations, Burma (through the Deputy Commissioner, Prome),—No. 461, dated the 21st March 1901.

WITH reference to your Circular No. 24 of 1901, I have the honour to submit, as below, a brief report on the Census operations.

(*a*) The general register of villages or towns and of the circle list was prepared in the Deputy Commissioner's office, Prome.

(*b*) The numbering of houses was commenced on the 22nd October and completed on the 6th November 1900.

(*c*) The agency employed consisted of 1 Charge Superintendent, 9 Supervisors, and 66 Enumerators.

The Charge Superintendent was the Municipal Secretary, the Supervisors were the headmen of wards, and the Enumerators were mostly traders of the town. They were all engaged unpaid.

(*d*) The preliminary enumeration was commenced on the 31st January and completed on the 25th February 1901. The record of the preliminary enumeration was tested by the Supervisors, who visited every house.

* * * * *

I would select the following officers for special commendation, namely—

(1) Maung Sein Da, Municipal Secretary and Charge Superintendent, who took an intelligent interest in the work and carefully instructed his Supervisors and Enumerators and finally had it accurately and expeditiously carried out.

(2) Maung Po Hlaing, thugyi of Kyundawhla circle and Supervisor of Ôkpo ward.

(3) Maung Tha Aung, headmen of Hinthagan ward and Supervisor.

(*f*) The charge and circle summaries were completed and submitted to the Deputy Commissioner, Prome, on the evening of the 3rd March.

(*g*) *Nil.*

(*h*) The attitude of the people was good and there were no prosecutions under the Act.

(*i*) The total actual cost of the operations was Rs. 27-2-3.

* * * * *

(*j*) The results obtained were, I believe, correct.

(*k*) According to the particulars that can be gathered from the births and deaths returns of the past 10 years (1891 to 1900), the population of the town should be 11,209 as against the present figures 11,044.

But some of the inhabitants are said to have gone to the Pegu district, where work is more plentiful and better paid, and some have temporarily shifted outside the municipal limits in order to manufacture *dilon* on the Rangoon-Prome road-sides for the Public Works Department.

* * * * *

From M. LAURIE, Esq., I.C.S., Deputy Commissioner, Bassein, to the Superintendent, Census Operations, Burma,—No. 2281-5M., dated July 1901.

IN accordance with your Circular No. 24 of 1901, I have the honour to submit a brief report on Census operations in the Bassein district.

* * * * *

(*a*) *Preparation of register.*—The population of the district was estimated at 375,000 and the operations for preparing the register were based on this estimate. An average of five persons to a household, 40 houses to a block, and 12 blocks to a circle was assumed. This estimate showed that approximately 1,800 Enumerators and 152 Supervisors would be required. For the purpose of selecting Enumerators printed notices and forms were issued direct to all village headmen by means of runners, who distributed the notices and forms over the area assigned to them and picked up the notices and forms on their return journey.

* * * * *

The forms and notices, when collected, were brought in to the Township Officer, who, in consultation with the Inspector of Land Records, checked the list of houses and selected Enumerators and Supervisors from amongst revenue surveyors, circle thugyis, *thugyisayés*, and village headmen.

These lists, having been passed by the Township Officer and Inspector, were sent to the Superintendent of Land Records, who, in consultation with the General Department of my office, prepared maps, circle lists, &c.

* * * * *

(*b*) *House-numbering.*—House-numbering began on the 15th October, and the last report of the completion of house-numbering in the remotest tracts was received on the 25th December.

* * * * *

(*c*) *Agency employed.*—Exclusive of municipalities, railways, and ports, the number of Superintendents was nine, Supervisors 137, and Enumerators 2,101. Of the nine Superintendents seven were Inspectors of Land Records and two were Township Officers.

The Supervisors consisted of about 70 revenue surveyors and circle *sayes*, the thugyis of circles, and a limited number of intelligent headmen.

* * * * *

With the exception of the few village headmen who were selected as Supervisors, every village headman was an enumerator. The remaining appointments were filled by ten-house *gaungs*.

* * * * *

The railway line was divided up into sections and placed under the separate charge of three Superintendents, 11 Supervisors, and 69 Enumerators, all being railway men or contractors.

* * * * *

(*d*) *Preliminary enumeration.*—The preliminary enumeration was begun on the 15th January 1901 and completed on the 27th February. The delay in completing the enumeration was due to the non-receipt of forms from Rangoon, our later indents being considerably in excess of the requirements anticipated earlier in the operations.

* * * * *

The great bulk of the enumeration was finished by the prescribed date, namely, the 15th February.

The shifting population of coolies on railway construction was enumerated at a later date than the 15th February.

* * * * *

As a special difficulty to be provided against in subsequent Censuses might be mentioned the probability of the number of sheets required being under-estimated. I myself had a careful estimate framed and added 20 per cent. to it; but even that was found quite inadequate.

* * * * *

(*e*) *The final enumeration.*—The 2nd Assistant in my General Department, Maung Ba, was placed on special Census duty for several months.

* * * * *

Maung Ba did an enormous amount of useful and intelligent work and deserves special credit.

Thanks are due to Commander Downes, who placed three steam-launches at my disposal for trips lasting from sunset to sunrise on the night of the Census.

* * * * *

Mr. Ryan, the Divisional Forest Officer, undertook to see that forest labourers should encamp for the night within reach of enumeration.

Mr. Heywood of the Telegraph Department preferred to enumerate his camp himself and did so satisfactorily.

* * * * *

It is to a great extent owing to the excellent organization of the Land Records Department under the charge of Mr. P. H. Beechey that the general work throughout the district was carried out efficiently.

* * * * *

Mr. F. D'Attaides, Chief Clerk in my office, superintended the heavy office work in a capable and methodical manner.

* * * * *

(*f*) *District, charge, and circle summaries*—The preparation of the summaries was the least satisfactory part of the work. Clear orders had been given, and there were no visible obstacles in the way, but it was like drawing teeth to get the books and summaries out of some of the men.

* * * * *

(*i*) The total charges debited to Census were Rs. 260-7-0, which includes the cost of printing notices, engaging copyists and runners, and travelling allowance.

* * * * *

(*k*) The vital statistics show that the worst scourge of the people is malaria * * * But, if malarial fever is the most widespread, cholera is the most dreaded. It is seldom prevalent to so great an extent as to deserve to be called epidemic, but it is constantly breaking out here and there in isolated villages. Having done its work in one village, it dies out suddenly and appears next in some village many miles away.

* * * * *

As regards small-pox, which holds the next place to cholera in the fears of the people, there are, I think, few working District or Medical Officers who would not recommend the introduction of compulsory vaccination among the rural population.

* * * * *

(*l*) *Emigration and immigration.*—Towns have neither grown nor diminished to any marked extent. This district is not now considered by the Upper Burman to offer him the same chances as the new land now opening out in Myaungmya and Thôngwa. Immigration from Upper Burma apparently follows the main river. There is not really very much room now in this district for the immigrant.

* * * * *

From M. LAURIE, Esq., President, Bassein Municipality, to the Superintendent, Census Operations, Burma,—No. 191-18G., dated the 20th July 1901.

IN terms of the instructions in Census Department Circular No. 24 of 1901, I have the honour to report as follows.

(*a*) The General Town register referred to in Chapter III was prepared early in August 1900 and the abstract sent to the Superintendent of Census at the end of that month together with a map (4 inches to a mile.) * * *

(*b*) House-numbering commenced from the 15th of October 1900 and was brought to completion about the middle of November, with the exception of Pandingôn ward, which was numbered late in January 1901. * * *

(*c*) Bassein Municipality forms one charge. There were 38 supernumarary Supervisors, who were clerks, policemen, and school-masters in Government and Municipal employ. There were also 45 headmen of wards who acted as Supervisors. The Enumerators, who were policemen and elders appointed under the Towns Act, numbered 241, exclusive of those in charge of rice-mills, godowns, hospitals, jails, railway, and the port. * * *

(*d*) The preliminary enumeration in most of the wards and blocks commenced from the 1st February 1901. It was completed before the 20th idem.

* * * * *

(*e*) The work done on the whole was fairly satisfactory. The burden of directing and supervising the work fell on Mr. Pandorff, Municipal Secretary, who practically relieved the Committee of all trouble in the matter. * * * He has earned special mention. Mr. Hill, the Assistant Superintendent of Police, helped a great deal in boat enumeration work. Maung Suliman, the Head Clerk in the Municipal office, was of great assistance to me in carrying out the work. Mr. G. Daniell proved himself very useful in the enumeration work amongst the natives of India as interpreter.

(*f*) The circle summaries were prepared by the Supernumerary supervisors and completed on the appointed date except in one case. The charge summary was submitted to the Deputy Commissioner's office punctually on the 4th instant, the 3rd being a Sunday.

* * * * *

(*i*) The total cost of Census work amounted to Rs. 57-9-0. This represents the cost of stationery and contingencies.

* * * * *

(*k*) During the last decade the number of births was 9,959 and the number of deaths 9,677.

From the President, Ngathainggyaung-Daunggyi Municipal Committee, to the Superintendent, Census Operations, Burma,—No. 10En., dated the 25th April 1901.

IN accordance with your Circular No. 24 of 1901, Census Department No. 223-51C.O., dated the 8th January 1901, I have the honour to submit the report on the Census operations of the Ngathainggyaung-Daunggyi Municipality.

* * * * *

(*a*) The general register of the town was prepared according to Article 2, Chapter III, of the Burma Census Code, showing carefully the external boundaries of the Municipal limits. The town was divided into three circles under one charge, and also subdivided into 38 blocks. * * * The agency employed, such as Charge Superintendent, Supervisors, and Enumerators, were appointed according to Article 4 of Chapter III, there being one Charge Superintendent, three Supervisors, and 40 Enumerators. * * *

The circle list was prepared according to Circular No. 8 of 1900 in manuscript form and the columns were filled in as instructed.

* * * * *

(*b*) The house-numbering commenced on the 25th October and was completed on the 14th November 1900. The houses were numbered block after block and circle after circle. The substances used in numbering were white, red, and blue paint in each circle respectively. * * * The house list was written up and completed on the 25th November 1900.

(*c*) The preliminary enumeration commenced on the 15th January 1901. The Enumerators were thoroughly taught and given full instruction by the Charge Superintendent and Supervisors. * * * The preliminary enumeration was continually checked and completed on the 25th of February 1901. * * *

(*e*) The final enumeration was carried out on the 1st March 1901 and completed on the 2nd idem.

* * * * *

The officers who performed specially good work are Maung Sein and Maung Po Gywe. The first officer is Head Judicial Clerk in the Subdivisional Officer's Court, who performed the duties of Charge Superintendent. The latter is Secretary of the Municipality and was employed as a Supervisor. They rendered most valuable service during the Census operations.

The names of the other officers selected for special commendation are as follows :—

(1) Maung Myaing, Supervisor, II Circle.
(2) Maung Po Min, Supervisor, III Circle.
(3) Maung Nyaung,
(4) Maung Po Hla,
(5) Maung Aung San Hla Dun,
(6) Maung Aung Gyaw,
(7) Maung Nge,
(8) Maung Shwe Yok
(9) Maung Po Gwe (2),
(10) Maung Po Pe,
(11) Maung Shwe Ku,
(12) Maung Po Han,
(13) Maung Maung,
(14) Maung Po Han.
(15) Maung Maung (2),
(16) Maung Pha Aung,
(17) Maung Po Lon,
(18) Maung Maung (3),
(19) Maung Gale,
(20) Maung Saw,

} Enumerators.

(*f*) The charge and circle summaries were carefully prepared and submitted to the Deputy Commissioner, Bassein, on the 4th March 1901.

* * * * *

(*i*) The total actual cost of the Census operations amounted to Rs. 75 only.

* * * * *

From H. E. McCOLL, Esq., I.C.S., Officiating Deputy Commissioner, Myaungmya, to the Superintendent, Census Operations, Burma,—No. 902-3C.—3, dated the 26th March 1901.

AS requested in your letter No. 223-51C.O., dated the 18th January 1901, I have the honour to forward a brief report on the census operations in the district of Myaungmya.

General Register of villages and towns.—The preparation of this register was commenced immediately on the receipt of Revenue Department letter No. 112-3C.—1, dated the 6th April 1900, from the Revenue Secretary to the Government of Burma, which was

received in this office on the 17th April 1900. The registers from the four townships were received in my office at the end of June, but they were returned for amendment about the middle of July and were received back at the end of September.

* * * * *

An abstract was prepared from this register and was despatched to the Superintendent of Census on the 5th October 1900.

The circle lists were then commenced. They were completed by the end of October and were, with the maps, in the hands of the Supervisors about the 20th November.

House-numbering.—This was commenced on the 1st November 1900, * * and was not finally completed before the 15th January.

* * * * *

Agency employed.—The district was divided into six charges (exclusive of towns). Pantanaw and Thigwin townships formed one charge each. Myaungmya and Wakèma townships, owing to their size, were each divided into two charges.

Four of the Charge Superintendents were Inspectors of Land Records. The Myoôks of Wakèma and Myaungmya had each one charge in their respective townships.

There were 154 circles. The Supervisors were mostly Revenue Surveyors and *thugyi-sayès*.

* * * * *

There were 2,169 blocks. The Enumerators were mostly village headmen, ten-house *gaungs*, and the most intelligent villagers that could be obtained.

* * * * *

Preliminary enumeration.—The following forms were received about the middle of December: 27,000 general schedules in Burmese, 2,200 covers, 4,350 block lists.

After the first abstract was forwarded it was found that some hamlets had been omitted from the register of villages and so a revised abstract was forwarded on the 27th November.

* * * * *

The following forms were wired for on the 3rd January 1901:—11,000 general schedules 1,000 covers, 600 block lists.

These were received in two instalments on the 24th January and 5th February.

* * * * *

Though the number of forms at first received was undoubtedly insufficient, still I doubt whether the number asked for by the Township Officers was necessary.

* * * * *

The preliminary enumeration commenced on the 20th January and was for the most part completed by the 15th February.

* * * * *

The final Census was taken on the night of the 1st March. There were no special difficulties, but in some cases it was not completed by midnight.

* * * * *

The preparation of the district, charge and circle summaries.—The circle summaries were for the most part received by the Charge Superintendents on the 3rd March, but in a few cases on the 4th March. The charge summaries were received in the district office on the 5th and 6th March.

Orders had been given for summaries to be made for some circles difficult of access from the preliminary enumeration figures, so that the district provisional totals might not be delayed owing to the non-receipt of the final enumeration figures from these circles. These figures were received in the district office a few days before the final enumeration took place, but they were not used, as the summaries from the circles in question prepared from the final figures were received in time.

The district summary was completed at 2 P.M. on the 7th March and the provisional totals were wired to Calcutta and Rangoon at 2-30 P.M. on the same day.

* * * * *

Including the towns of Myaungmya and Pantanaw, there were eight Charge Superintendents, 161 Supervisors, and 2,617 Enumerators employed.

* * * * *

(*g*) There were no non-synchronous areas in this district.

(*h*) There were no prosecutions under the Census Act. The people readily rendered assistance in the operations.

(*i*) The total cost of the operations, excluding forms, stationery, &c., supplied from the Census office, was Rs. 78-10-0 up to 25th March 1901.

(*j*) The number of occupied houses and of males and females may, I think, be taken as very nearly accurate. The ages cannot be expected to be more than approximately accurate.

* * * * *

Immigrants come from all parts of Burma and from India, but chiefly from the districts of the dry zone of Upper Burma. The immigrants come chiefly to the Wakèma township, the population of which has increased since 1891 from 64,402 to 106,179 or 64 per cent.

* * * * *

From H. E. McCOLL, Esq., I.C.S., Officiating Deputy Commissioner, Myaungmya, to the Superintendent, Census Operations, Burma,—No. 903-3C.—3, dated the 26th March 1901.

I HAVE the honour to forward a brief report on the Census operations in the towns of Myaungmya and Pantanaw.

Town of Myaungmya.

The general register for the town of Myaungmya was commenced about the 1st September and completed about the 15th of that month.

* * * * *

House-numbering was commenced on the 2nd December and completed by the 12th December.

* * * * *

The number of Charge Superintendents appointed was one, Supervisors two, and 20 Enumerators.

Schedules and forms were received early in January and an additional supply, in compliance with the revised abstract, forwarded about the 25th of January 1901. Forms were first distributed on the 18th January and again at the end of January. The preliminary enumeration commenced on the 4th February and was completed in Circle No. 1 on the 16th February and in Circle No. 2 on the 12th February.

* * * * *

The final enumeration commenced at 7 P.M. on the night of the 1st March, and was completed by 11-30 P.M. in Circle No. 2 and by 2 A.M. on the 2nd March in Circle No. 1.

* * * * *

The steamship *Bandoola* from Bassein came in at 11-30 P.M. on the night of the final Census, and the schedules of passengers and crew were handed over to the Supervisor of Circle No. 2 about 11-55 P.M.

* * * * *

The number of Supervisors and Enumerators actually employed were—

Circle No. 1—Maung Gyi up to end of January; Maung Lu from the 5th February to the date of final enumeration.

Circle No. 2—Mr. C. J. W. Donovan; Maung Po Sin for moving and moored boats; and the number of Enumerators employed was 28—20 for the town and eight for boats.

* * * * *

Mr. Fisher, Head Master of the Municipal School, took an interest in the Census as Charge Superintendent and Mr. Donovan, Chief Clerk, did good work as Supervisor, and also in the office.

Town of Pantanaw.

The general register for the town was commenced in September and completed about the 20th of that month.

* * * * *

House-numbering was commenced about the 1st November and completed by the end of that month.

* * * * *

The circle lists were started at the beginning of October and completed in the first week of that month.

* * * * *

Schedules and forms were received about the middle of December in accordance with the abstract forwarded on the 6th October and were found to be sufficient. The preliminary enumeration was commenced about the 20th January and completed about the 15th February. The circle summaries were received by the Superintendent on the 3rd March and the charge summaries were received in the district office on the 6th March, and were included in the district summary, which was completed by 2 P.M. on the 7th March, the provisional totals being wired to Calcutta and Rangoon at 2-30 P.M. on that date.

The number of Supervisors and Enumerators actually employed on the night of the final Census was three Supervisors and thirty-three Enumerators.

* * * * *

From Major F. D. MAXWELL, Deputy Commissioner, Thôngwa, to the Superintendent, Census Operations, Burma,—No. 4331, dated the 31st August 1901.

IN compliance with your letter No. 62-51C.O., dated the 29th August 1901, I have the honour to forward the report written by Mr. English.

* * * * *

Census Report.

(*a*) *The preparation of the general register of villages or towns and of the circle list.*—On the 23rd April 1900 all Township Officers through Subdivisional Officers were asked for materials to prepare the register of villages. Their reports were received in July 1900, during which month columns 1 to 8 of the Register were filled up by the Chief Clerk.

* * * * *

Speaking generally, the charges were unwieldy and the circles not formed with a view to the state of the things in March.

On the 8th November 1900 the Subdivisional Officers were asked for information to prepare the register of towns. Their reports were received in December 1900, during which month the register was completely written up. During the first fortnight of January 1901 appointment orders, circle maps, and circle lists were prepared and finished. On the 22nd January 1901 they were issued to the Subdivisional Officers for distribution.

(*b*) *House-numbering.*—House-numbering was commenced on the 1st November 1900 and completed on the 15th November 1900. The difficulties experienced were the numbering of field huts and fisheries.

* * * * *

Ultimately it was arranged that all occupants of temporary field huts should return to the village on the 1st March. This was no hardship as harvest operations were nearly everywhere complete. Occupants' names were recorded at the preliminary enumeration as being in the village, and double enumeration or complete omission was, I hope, avoided.

* * * * *

Special steps were taken to have fisheries inspected, houses numbered, and Circle lists corrected, and fishermen were enumerated in their fishery huts, where they remain till April and May.

In towns the numbering was well and accurately done.

(*c*) *The agency employed.*—There were 20 Charge Superintendents (11 for rural areas, 7 for towns, and 2 for Municipalities); Supervisors 259 (221 for rural areas, 21 for towns, and 17 for Municipalities); Enumerators 2,918 (2,579 for suburban areas, 200 for towns, and 139 for Municipalities).

* * * * *

(*d*) *The preliminary enumeration.*—

Commenced in rural area—15th January 1901.
Commenced in town area—1st February 1901.
Commenced in Municipalities—12th February 1901.
Loose schedules, &c., were issued to Subdivisional Officers on the 14th December 1900.

Preliminary enumeration commenced in rural areas about the 15th January 1901 and was completed more or less (in many cases on rough paper) by the 15th February 1901. The tendency was to worry about the exact meaning of columns and the minor incidents, while forgetting that the primary object of a Census is to number the people.

* * * * *

(*e*) The final enumeration was, I think, well done. At any rate, most of the schedule books showed signs of red ink. Of Census officers Maung Ba Gyi and Po Ya, Township Officer and Inspector of Land Records of Danubyu, worked specially well and their checking was most complete. The following officers also worked well:—

Maung Kyaw, Township Officer, Ma-ubin, and Maung Ni Aung, Inspector of Land Records, Ônbin.

Maung Aung Zan, Subdivisional Officer, Pyapôn, had a very heavy subdivision (population 191,500), containing four town charges and seven rural charges.

* * * * *

Mr. Tuck, Assistant Commissioner, was special officer entrusted with compiling district provisional totals and was assisted by Maung Kin, Myoôk, who also saw to and checked schedules as they came into headquarters. Both these officers were most energetic. Maung Kin was also Chief Superintendent of the Ma-ubin Municipality, and he especially deserves commendation. My thanks are due to Mr. Minus, Chief Clerk, on whom has fallen the heavy clerical work connected with Census. He has greatly contributed to keeping the Census and inspecting offices up to the mark. Lastly I must thank Captain Maxwell for the advice and assistance in Census matters which he has given me, and for helping me in ordinary district work for a week from the 26th February to the 3rd March.

I arranged that all charge summaries for the Pyapôn subdivision, excluding Dedayè town and township (except Ônbin circle), should be checked by the Subdivisional Officer, Pyapôn, before submission to the Deputy Commissioner. Most of the summaries had not arrived on the 4th, so I proceeded with four clerks by launch to Pyapôn, reached there at 10 P.M. and found everyone had adjourned to a *pwè*; started checking, and went on till 1-45 A.M. began again at 6 and left with all charge summaries complete at 9, reaching Ma-ubin at 5 P.M. The district total was then made out and sent in on the evening of the 5th.

* * * * *

(*h*) Six prosecutions were sanctioned (all in the Ma-ubin subdivision: four in the Ma-ubin township and two in Kyaiklat) for refusal to enumerate or slackness.

* * * * *

No prosecutions were actually held, as the threat proved sufficient in four cases and the recalcitrant enumerator left the district entirely in two cases.

* * * * *

(*j*) On the whole I think the Census has been correctly taken as far as numbers are concerned.

(*k*) *Vital statistics.*—

Year.	Births.	Deaths.	Differences.
1900	13,757	10,058	3,699
1899	12,709	9,997	2,712
1898	12,816	9,320	3,496
1897	10,664	9,237	1,427
1896	8,939	6,812	2,127
1895	8,137	6,495	1,642
1894	8,625	6,910	1,715
1893	10,078	7,134	2,944
1892	8,539	5,751	2,788
1891	5,744	5,258	486
Total ...	100,008	76,972	23,036

These figures are admittedly incorrect. The enormous increase of 149,000 odd is due to excess of births over deaths in a measure, but mostly to immigration from all districts of Upper Burma and Thayetmyo and neighbourhood.

* * * * *

From A. E. ENGLISH, Esq., I.C.S., President, Ma-ubin Municipality, to the Superintendent, Census Operations, Burma,—No. 403-1(Census), dated the 31st March 1901.

In compliance with your Circular No. 24 of 1901, I have the honour to forward a brief report on the Census operations in the Ma-ubin Municipality.

(*a*) The General register of the town and the circle list were prepared according to the division of wards in the town, and the number of houses was taken from the Municipal assessment registers.

(*b*) House-numbering commenced on the 6th November 1900 and was completed on the 11th November 1900 and checked by the Secretary and Supervisors.

(*c*) There were 27 Enumerators, four Supervisors, and one charge Superintendent. * * * The Enumerators and Supervisors were almost entirely clerks of the Headquarters office.

* * * * *

(*d*) The preliminary enumeration commenced on the 14th January and was completed on the 28th February 1901.

(*e*) There were no complaints of slackness. Special credit is due to Maung Khin, Charge Superintendent, who worked excellently.

The Secretary, Maung Shwe Ban, made the preliminary arrangements carefully.

(*f*) Charge and circle summaries were prepared on the 2nd March 1901 and were complete before any of the district totals came in.

* * * * *

(*j*) The results were correct, I think. Boat enumeration went on till the evening of the 2nd.

(*k*) The population has increased from 5,327 to 6,617. This is, if vital statistic figures are to be believed, entirely due to immigration.

* * * * *

From G. F. S. CHRISTIE, Esq., I.C.S., Deputy Commissioner, Henzada, to the Superintendent of Census Operations, Burma,—No. 2199-4C.—1, dated the 22nd April 1901.

I have the honour, in accordance with Census Circular No. 24 of 1901, to forward the following brief report on the Census operations in the Henzada district.

(*a*) In accordance with the instructions contained in Revenue Department letter No. 112-3 C.O., of the 6th April 1900, from the Revenue Secretary to the Government of Burma, the forms for the preparation of the preliminary register (Appendix A) which were received from the Superintendent of Government Printing, Burma, about the middle of April 1900 were compiled in this office.

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They were then sent out to Township Officers to be carefully checked and corrected whenever necessary.

* * * * *

After this was done, the registers were sent in for the preparation of abstracts showing the number of villages, houses, blocks, &c.

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When the whole of these registers and abstracts had been finished, circle lists were prepared in the District office and completed on the 22nd of October 1900, but not sent out for distribution to Supervisors till the 7th November owing to a slight delay in the preparation of the charge and circle maps.

* * * * *

(*b*) House-numbering was begun on the 1st of October 1900 and completed on the 12th January 1901.

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(*c*) The total number of Charge Superintendents, Supervisors, and Enumerators in the district (including the towns of Lemyethna and Ôkpo) was eight, 195 and 2,302 respectively, the Charge Superintendents being Inspectors of Land Records and the Supervisors and Enumerators being circle thugyis, revenue surveyors, *taiksayès*, village headmen and a few private individuals.

(*d*) The preliminary enumeration was begun about the 15th of January and completed about the end of February.

* * * * *

An almost universal error was the omission to enter the name Karen as a language in which a person might have literary knowledge. The large majority of Christian Sgaw-Karens can read and write this dialect and are accustomed in their ordinary daily life to use it in preference to Burmese. It is to be feared that by this omission the true extent to which the dialect is used may be insufficiently gauged. On the other hand, in this district at least, literary attainments of any kind are rare amongst the Pwo-Karens. In a note on the Census operations in Henzada Municipality the difficulties of classifying natives of India have been pointed out, and it may only be said that similar errors on a smaller scale prevailed in the district. It will be a long time indeed before Burmans begin to realize that there is no general language in use named *kulah*. Perhaps they will begin to give names of their own to the different dialects instead of trying to master the foreign pronunciation.

* * * * *

For the next Census I would suggest that a longer period, at least a full two months, be allowed for checking the schedules. It is quite impossible for Subdivisional or even Township Officers to get round the whole of their charges in a month and carry on their other duties at the same time, while the Charge Superintendents have generally failed to do the amount of work that is required.

The Subdivisional Officer, Henzada, specially commends the work of Maung Po Thu Daw, the Myoôk of Ôkpo, and I should say that in all probability the work was better done in Ôkpo and Lemyethna townships than in any other portion of the district. Mr. Andrew at Myanaung took interest and gave careful instruction to his Township Officers.

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(*e*) The final enumeration was carried out satisfactorily by the different officers concerned. The following officers deserve special commendation for the good work done by them:—

Mr. G. P. Andrew, Assistant Commissioner, Myanaung.
Maung Tin Gyaw, Subdivisional Officer, Henzada.
Maung Po Kyu, Township Officer, Lemyethna.
Maung Po Thu Daw, Township Officer, Ôkpo.
Maung Ôn Gaing, Township Officer, Henzada.
Maung Po Shin, Township Officer, Kyangin.
Maung Aung, Maung Yin Maung } Charge Superintendents.

* * * * *

(*f*) The preparation of the district summary was delayed by the circle summaries from the Ôkpo and Kanaung townships not being sent in in time. The charge summaries from these townships came in about the 3rd March 1901, but, owing to a misunderstanding of the orders on the subject, the circle summaries were not sent in till the 8th and 9th. The District provisional totals could have been telegraphed on the 7th March 1901 but for the delay in the submission of these circle summaries. As it happened, the totals were not telegraphed to Rangoon and Calcutta till the 9th March 1901. Mr. Buchanan was the officer who looked after the checking and submission of the District provisional totals. He was assisted by Mr. Morrison, a newly arrived Assistant Commissioner. Both these officers displayed commendable zeal and conscientiously performed their duties.

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(*h*) There were no prosecutions under the Census Act.

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(*i*) The total actual cost of the operations, exclusive of cost of forms, stationery, and the like, was Rs. 119-14-8.

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(*j*) The results obtained may be looked upon as accurate.

From G. F. S. CHRISTIE, Esq., President, Henzada Municipality, to the Superintendent of Census Operations, Burma,—No. 15-15—99, dated the 26th March 1901.

(*a*) *Preparatory work.*—From the beginning of August 1900 Mr. D. Hormusjee, Officiating Municipal Secretary, was deputed to make necessary arrangements for the preparation of the general register of Henzada town, showing (1) charges, (2) circles, and (3) blocks, for the coming Census operations, and was directed to prepare a plan showing the boundaries of each in accordance with the instructions contained in Chapter III of the Census Code, paragraph 8 (2). Subsequently special blocks were formed for dealing with the boat population.

(*b*) *House-numbering.*—The numbering of houses in the town was begun about the middle of October 1900, and completed on the 17th November 1900. * * *. For the purpose of Census operations, Henzada town was divided into 21 circles (of which one circle was for boat population).

* * * * *

The following were employed in connection with the work:—

Charge Superintendents, 4 (one boat). | Supervisors (including boat blocks), 21
Enumerators (including boat blocks), 103.

No paid agency was employed in any case, the whole staff of Census operators being selected from Government and Municipal employé's consisting of Assistant Superintendent of Police, Municipal Secretary, clerks of the Revenue, Judicial and Municipal Departments, Police sergeants, as well as subordinates of the Municipality and other persons of respectable standing.

(*d*) *Preliminary enumeration.*—From the 15th January 1901 schedule books were supplied to Supervisors who, at the same time, were instructed in detail as to how to carry out the work. The preliminary record was commenced on the 1st February and completed on the 15th February 1901.

The entries were made in the first instance by the Enumerators in pencil on blank-sheets of paper before entries in the schedules were made. They were subsequently checked by the Supervisors who, with the house-lists and schedule books in hand, compared the entries with the number of inmates. On the test proving correct they were entered in the schedule books in black ink. * * *.

(*e*) *Final enumeration.*—The work done by the Charge Superintendents, Supervisors, and Enumerators on the whole was fairly satisfactory. * * *. I would especially bring to notice the work of Maung Nyein amongst the Charge Superintendents; Maung Po Yin, Maung Ba E, and Maung Gôn Ban amongst the supervisors; and Maung Sein Thi amongst the enumerators. Mr. Phillips, Head Master, also worked hard in the most important and difficult charge. * * *.

(*f*) The preparation of district, charge, and circle summaries was completed on the 3rd. March and forwarded for check on the 4th March 1901 to the district office.

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(*h*) There were no prosecutions, and the general attitude of the people was one of indifference.

(*i*) Rupees 39-11-10 were expended on Census taking in this Municipality.

* * * * *

(*j*) The result obtained is believed to be fairly correct, considering the precautionary measures taken and the agency employed. The population of the area, which in 1891 com-

prised the whole town of Henzada, has considerably decreased, a fact due principally to the erosion of the river, which necessitated the romoval of a whole streetful of people. The energetic measures, too, adopted by the Health Officer to prevent over-crowding have in many cases compelled residents to change their abodes, and settle again on the further side of the main embankment. * * *

(*k*) The following statement will show the total births and deaths within the Municipal limits from 1891 to 1900.

	Male.	Female.	Total.
Births ...	3,343	3,215	6,558
Deaths ...	3,093	2,561	5,654

From the President, Kyangin Municipality, to the Superintendent, Census Operations, Burma (through the Deputy Commissioner, Henzada),—No. 308-42C.—10, dated the 24th March 1901.

With reference to Circular No. 24 of 1901 (Census Department No. 223-51C.O., dated the 18th January 1901), I have the honour to submit my report as follows:—

(*a*) The general register of towns was prepared in accordance with paragraph 4, Chapter III of Circular No. 7 of 1900. * * *

(*b*) The house-numbering was commenced on the 11th October 1900 and completed at the end of December 1900. No difficulties occurred in house numbering. The townspeople took interest in the operations.

(*c*) There are only one Charge Superintendent, two Supervisors, and 37 Enumerators. The Charge Superintendent is the Inspector of Land Records, one Supervisor is an advocate and the other the Municipal Secretary. The Enumerators are especially traders, teachers, and clerks.

(*d*) The preliminary enumeration was commenced on the 8th February 1901 and completed on the 15th February 1901. The work of testing the schedules took about ten days. * * *

(*e*) The work done by the Census officers under me is satisfactory. A list showing the names of the officers selected for special commendation is herewith submitted.

(*f*) The circle summaries were prepared on the 3rd March 1901 and submitted to the Charge Superintendent on the 4th March 1901. The total population within the limits of the Municipality was telegraphed to the Deputy Commissioner, Henzada, on the 6th March 1901.

(*g*) There are no non-synchronous areas in this town. * * *

(*h*) There was no prosecution under the Act. The people took interest in the operations.

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(*l*) The population in Census of 1891 is 8,116 and during the past ten years the number of births that exceeds the number of deaths is 446. Therefore the population should be 8,562. But according to the Census the population amounts to 7,186 only. * * *

List of the names of the officers selected for special commendation.

No.	Name of Supervisor.	Name of Enumerator.	Remarks.
1	Maung Kyaw Zan Hla ...	Maung San Ba	The Supervisors and the Enumerators shown are selected for special commendation as they have done their work well and taken great interest in the operations.
		Maung San Hla Baw ...	
		Maung Kya Hla	
		Maung Po Han	
		Maung Po Saw	
		Maung Po Gyi	
		Maung Po Khan	
		Maung Aung Tha ...	
2	MaungSo Gyi ..	Maung Po Hlaing ...	
		Maung Hmaw	
		Maung KyaukSwa ...	
		Maung An Bwè	

Census Report for the Myanaung Municipality, 1901. By G. P. Andrew, Esq., I.C.S., President.

(*a*) The general register of the town and the circle lists were prepared according to the instructions given in Chapter II of the Census Code.

There was only one Supervisor in the general register, but two other Supervisors were appointed after house-numbering was finished. Each Supervisor was supplied with a circle list and a map. * * *

(*b*) House-numbering was commenced on the 5th October 1900 and finished on the 19th October 1900. * * *

(*c*) For the Myanaung Municipality there was one Charge Superintendent, three Supervisors, and 35 Enumerators. I myself undertook the duty of Charge Superintendent and the three Supervisors were my Head Clerk, Municipal Overseer, and Secretary. *Ayat-ôks* and *akwet-ôks* were generally appointed as Enumerators. * * *

(*d*) The preliminary enumeration was commenced on the 15th January 1901 and completed on the 30th January 1901. All the entries in the enumeration books were read and corrected by the Supervisors. * * *

(*e*) The final enumeration was done well. * * * I am glad to select Maung Daik, Overseer and Census Supervisor, and Maung Ba and Maung Myo, Census Enumerators, for special commendation.

(*f*) On the morning of the 2nd March private and household schedules distributed to Europeans and Eurasians were collected and Enumerator's abstracts were prepared in the presence of Supervisors.

Charge and circle summaries were immediately compiled and the total number of houses and males and females was wired to the Deputy Commissioner, Henzada.

* * * * *

From G. F. S. CHRISTIE, Esq., I.C.S., Deputy Commissioner, Henzada, to the Superintendent, Census Operations, Burma,—No. 2934-4C.—1, dated the 20th May 1901.

I have the honour to forward herewith the report of the Zalun Municipal Committee on the Census operations in their Municipality.

Report.

(*a*) The general register of villages or towns and of the circle lists were prepared on the 1st November 1900 and submitted to the Superintendent of Census Operations on the 8th November 1900.

(*b*) The house-numbering was commenced in the middle of the month of October 1900, which was completed about the 26th October 1900.

(*c*) There were one Charge Superintendent, 10 Supervisors, and 36 Enumerators, who were all Burmans.

(*d*) The preliminary enumeration was commenced on the 15th January 1901 and completed by the end of the same month. It was tested by the Charge Superintendent and inspecting officers till the end of February 1901.

(*e*) The Census work was satisfactorily done by the Census officers, of whom Maung Po Kya, who tried his best in dealing with the preparation of the Census work till it was over, is the best man.

(*f*) The charge and circle summaries for the provisional totals were prepared on the morning of the 2nd March and submitted on the same day.

(*g*) *Nil.*

(*h*) *Nil.*

(*i*) The sum of Rs. 7-15-0 was expended for purchase of nibs, pen-holders, and lanterns for the Census work.

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Report on the Census operations in the Toungoo district in 1901.

TOUNGOO SUBDIVISION.

(*a*) The preparation of the general register of villages or towns and of the circle list was conducted under the immediate supervision of the Deputy Commissioner. * * *

(*b*) *House-numbering* started about the 12th of October 1900 and was completed about the 23rd of November.

* * * * *

(*d*) *The preliminary enumeration.*—The total number of Supervisors and Enumerators employed in the subdivision were 1,580 Enumerators and 426 Supervisors.

Supervisors were chiefly village headmen and clerks; Enumerators were taken chiefly from amongst the ten-house *gaungs*. * * *

The preliminary enumeration commenced about the 15th January 1901.

* * * * *

(*e*) *The final enumeration.*—Myoôk Maung Kan Tha, Myoma township, did the best work in this subdivision in my opinion. He took great interest and pains in his Census duties. Myoôk Maung San We of Ôktwin, however had the heaviest work. The final enumeration was on the whole very creditably done throughout the subdivision.

(*f*) *The preparation of the district charge and circle summaries.*—The charge and circle summaries were prepared under the direct supervision of the Charge Superintendents, who distributed themselves at appointed centres to receive them from the Supervisors.

* * * * *

The Myatsawnyinaung Pagoda, 7 miles south-east of Toungoo, has its annual Pagoda festival which attracts some 1,273 visitors to it. This year the big day happened to fall on the 1st March. Mr. Field and myself (the Subdivisional Officer) had a preliminary survey of the Pagoda, its surroundings and approaches and made arrangements accordingly to cope with the expected crowd by enlisting 88 Enumerators from amongst the pagoda *lugyis*, trustees, and office clerks. These were allotted their respective blocks and Supervisors their circles round about the pagoda armed with passes. The Deputy Commissioner and myself visited the Pagoda on the morning of the 1st March and satisfied ourselves as to the arrangements made.

Myself, Myoôks Maung Gyi and Maung Kyaw, together with Mr. Molloy, the District Superintendent of Police, remained throughout that day and night at the pagoda and its neighbourhood, inspecting and checking the work done.

* * * * *

SHWEGYIN SUBDIVISION.

(*a*) The preparation of the general register of villages (Appendix A) was conducted under the direct supervision of the Deputy Commissioner. * * *

(*b*) The numbering of the houses began from the 15th January 1901 and was not completed in some parts of the Kyaukkyi township till the 15th February 1901. * * *

(*c*) There were two Charge Superintendents, one for each township. * * *

(*d*) The preliminary enumeration commenced from the 15th January and was for the greater part completed by the end of that month.

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(*f*) The charge and circle summaries were prepared under the direct supervision of the Charge Superintendents.

* * * * *

KAREN HILLS.

(*a*) The preparation of the general register and circle list was done personally by the Deputy Commissioner. * * *

(*b*) The numbering of houses was commenced at different periods in the Karen Hills during November and December 1900. * * *

(*c*) There were two Charge Superintendents. * * *

The Supervisors and Enumerators employed were chiefly village headmen, *sayas* or pastors of villagers, and ten-house *gaungs* of villages in the plains.

(*d*) The preliminary enumeration was commenced on or about the 15th January and was completed at different periods. * * *

(*e*) The final enumeration was well done by both the Charge Superintendents, but the Leiktho Myoôk showed the most zeal and was the first man in the Toungoo district to submit his returns.

(*f*) The charge and circle summaries were prepared by the Charge Superintendents or under their direct supervision.

* * * * *

From MAUNG LAW TAT, Vice-President, Shwegyin Municipality, to the Superintendent, Census Operations, Burma,—No. 81-4—1, dated the 9th April 1901.

With reference to your Circular No. 24 of 1901 (Census Department No. 223-51C.O., dated the 18th January 1901), I have the honour to enclose herewith a report as requested therein.

Report on the Census work in the Shwegyin Municipality.

(*a*) *The preparation of the general register of villages or towns and of the circle list.*—The general register A was prepared by the Charge Superintendent, Mr. C. M. Lazarus, and completed on the 24th November 1900, and extracts from the above register showing the different blocks were given to all Enumerators on the same date.

* * * * *

(*b*) *House-numbering.*—The house-numbering was commenced immediately on the completion of the Circle Register A, *i.e.*, on the 24th November 1900, and completed by the middle of December.

(*c*) *The agency employed.*—There was 1 Charge Superintendent, 6 Supervisors, and 41 Enumerators employed, all unpaid.

* * * * *

(*d*) *Preliminary enumeration.*—The preliminary enumeration was commenced on the 25th January 1901 and completed by the middle of February, and the testing work was taken in hand by the Charge Superintendent and the Circle Supervisors at the completion of the preliminary enumeration and completed by the 27th February 1901.

* * * * *

(*e*) *The final enumeration.*—The final enumeration was taken on the night of the 1st March 1901.

* * * * *

(*f*) *Preparation of the district, charge, and circle summaries, &c.*—The charge and circle summaries were prepared on the 2nd March and the results obtained were wired to the Deputy Commissioner, Toungoo on the 3rd instant, in accordance with the instructions received from the Superintendent, Census Operations.

* * * * *

From R. B. HAWKES, Esq., Deputy Commissioner, Salween, to the Superintendent, Census Operations, Burma.,—No. 169-102, dated the 1st April 1901.

With reference to Circular No. 24, dated the 18th January 1901, I have the honour to forward herewith a brief report on the Census operations in this district.

* * * * *

SALWEEN DISTRICT.

Brief report on the Census operations.

(*a*) *The preparation of the General Register of villages or towns and of the circle list.*—The general register of villages was prepared on the basis of the recent revenue assessment-rolls with the assistance of the circle thugyis and completed on the 26th July 1900.

The Census circle lists were written up in the office by the clerks and forwarded to the Supervisors on the 10th November 1900.

(*b*) *House-numbering.*—The numbering of houses in Papun was commenced on the 20th November 1900 under the supervision of the Township Officer and completed on the 22nd November 1900.

(*c*) *The agency employed.*—The following agency was employed :—

Charge Superintendents	4
Supervisors	44
Enumerators	145

Supervising Census officers were selected from the following classes,—Police officers of higher grades, clerks, thugyis, petition-writers, and intelligent non-officials. In rural districts Enumerators consisted of police constables, *yazawutgaungs*, *kyedangyis*, and traders.

There was much difficulty in procuring qualified Enumerators in the district owing to the illiterate condition of the people. In many instances the Supervisors accompanied the Enumerators to their blocks and made the entries themselves in their schedules.

(*d*) *The preliminary enumeration.*—The general schedules were received here on the 3rd January 1901 and despatched to the Supervisors on the 8th January 1901 for distribution to their Enumerators.

The work of preliminary enumeration was commenced as each Enumerator received his schedules. The earliest date on which the work commenced was on the 16th January 1901.

During the progress of the preliminary record the work was tested by the Charge Superintendents, who visited a number of villages and made corrections where necessary in the general schedules. They have also given to the Supervisors and Enumerators all the advice and assistance on the difficult points which they could not understand.

(*e*) *The final enumeration.*—On the night of the final Census the Supervisors visited each house in large villages in their circles accompanied by the Enumerators. The entries were read over to the chief member of the family and fresh entries and erasures made to correspond with the actual state of things on the night of the Census.

(*f*) *The preparation of the district, charge, and circle summaries.*—The circle summaries from most of the Supervisors reached this office between the 2nd and 6th March 1901.

There was considerable delay in the receipt of the summaries from Mewaing, Kadaingti, and Kawludo, due to the outbreak of small-pox, and the Karens deserted their villages and hid themselves in almost inaccessible places. Both the Supervisors and Enumerators experienced the greatest difficulty in finding them out.

It was also found that in some cases illiterate men had been appointed as Enumerators and in consequence the work of Census enumeration was thrown entirely on the Supervisors, as no local agency was available.

(*h*) *Prosecutions under the Act, if any, and the attitude of the people towards the operations.*—There were no prosecutions under the Census Act. The attitude of the people was satisfactory, as they rendered every assistance to the Enumerators.

(*i*) *The total actual cost of the operations, exclusive of the cost of forms, stationery, &c.*—No expenditure of any kind was incurred in this district in connection with the Census operations.

(*j*) *The correctness or otherwise of the results obtained.*—I consider the results very good.

(*k*) *Vital statistics.*—Not collected in this district.

(*l*) *Emigration and immigration.*—I do not consider this has been affected by roads, but is due to the steady yearly increase.

From R. C. M. SYMNS, Esq., I.C.S., Deputy Commissioner, Thatôn, to the Superintendent of Census Operations, Burma,—No. 1256-20H.—1, dated the 4th April 1901.

I have the honour to forward a report on the Census operations of this district in accordance with Circular No. 24 of 1901 as follows:—

(*a*) *Preparation of general village register and circle list.*—Copies of the register were received here during the third week of April and distributed to the Subdivisional Officers the same week, with clear and definite instructions as to the proper and correct method of preparing the same. * * * The completion of the register in July was followed by the preparation of circle lists by the Charge Superintendents and Supervisors in concert, which was got through with sufficient rapidity.

(*b*) *House-numbering.*—This was taken in hand on the 15th October in Kyaikto subdivision and completed on the 15th November. In Thatôn subdivision it was begun on the 1st October 1901 and got through about the 16th November, while in Pa-an it started on the 1st November and ended on the 22nd December.

* * * * *

(*c*) *Agency employed.*—Land Record Inspectors were appointed Charge Superintendents in their respective townships, while the revenue surveyors, *taikthugyis*, and *ywathugyis* were employed as Supervisors, and the ten-house *gaungs* and comparatively intelligent villagers were selected to undertake the work of enumeration.

* * * * *

(*d*) *Preliminary enumeration.*

Name of subdivision.	Date of co	Date of completion.
Kyaikto	15th Janua	15th February 1901.
Thatôn	4th Februa	15th February 1901.
Pa-an	15th Janua	23rd February 1901.

From the above it will be seen that, except in the Thatôn subdivision, it took over a month to complete the preliminary enumeration. * * * The testing work done by the Charge Superintendents and Supervisors was quite satisfactory and was as complete as could be expected of them. They were not only hampered by their legitimate duties of *kwin* inspecting and preparing land revenue assessment-rolls, which demanded their equally prompt attention, but also they were put to considerable inconvenience and trouble by the absence of the majority of the villagers in the fields.

* * * * *

(*e*) *Final enumeration.*—This was done on the night of the 1st March everywhere in the district, starting from 6 P.M., till in some cases, the small hours of the following morning. All Census officers from the Charge Superintendents downwards have, I understand, done their best from first to last. * * * The Subdivisional Officer, Kyaikto, commends the following officers to my notice as having done good Census work,—Maung Po Yeik, Township Officer; Maung Shwe Win, thugyi; Maung Ba Kyaw, head clerk; and Maung Shwe Paw, *taiksayè*. The Subdivisional Officer, Pa-an, mentions Maung Bya and Maung Ba Pu, Land Records Inspectors, Maung San Tu, head clerk, and Maung Ba Thein and Maung Thin, clerks, as having taken great pains in the work. The following officers have done well in the Thatôn subdivision,—Maung Po U, Land Records Inspector, and Maung Po Thein, Land Records Inspector.

(*f*) The charge and circle summaries were received in the district office between the [illegible] and the 7th March. The instructions contained in Circular No. 16 of 1900 were followed, [illegible] special messengers employed in cases of remote tracts where delay in the receipt of [illegible] was anticipated. The preparation of the district summary was taken in hand by [illegible], Additional District Judge, as soon as the charge and circle summaries were in

and the preliminary figures of three townships had to be worked upon for the "provisional totals," as the final were not received in time. By 9 o'clock at night on the 7th March the required telegrams were ready and despatched to Rangoon and Calcutta.

(*g*) *Operations in non-synchronous tracts—Hlaingbwè.*—Commenced on the 1st February and ended on the 26th February; some Supervisors and Enumerators had to be engaged at a cost of Rs. 219-12-0

The services of one chief head constable and three police sergeants were utilized as Supervisors and Enumerators.

* * * * *

(*h*) No prosecutions under the Act were instituted in this district. A few cases of remissness and neglect of Census duty were, however, brought to my notice, but they were not of such a nature as called for punishment. * * * The total actual cost of the operations in this district amounted to Rs. 344-12-6 up to date, and the results appear to me to be satisfactory and correct.

(*k*) *Vital statistics.*—There have been no epidemics of any note in the district during the past decade.

(*l*) *Emigration and immigration during the past 10 years.*—The native population will be found to have increased in the Thatôn subdivision as native coolies have gradually ousted the Burmans to a large extent.

From R. C. M. SYMNS, Esq., I.C.S., President, Thatôn Municipality, to the Superintendent, Census Operations, Burma,—No. 56—32, dated the 9th March 1901.

In compliance with your Circular No. 24 of 1901 (Census Department No. 223-51C.O., dated the 18th January 1901), I have the honour to report as follows :—

(*a*) Circle lists were prepared in accordance with the rules.

(*b*) House-numbering commenced from the 3rd October and was completed on the 20th November 1900 in the town. For the *Tabaung* festival the numbering of stalls commenced on the 26th February 1901 and was completed on the same date.

(*c*) There were two Charge Superintendents, both were Gazetted officers, seven Supervisors, five ward headmen and the other two the Subdivisional Police Officer and the Municipal Secretary. There were 94 Enumerators employed in the town and *Tabaung* feast; 23 were clerks, school-masters and policemen, the remaining 71 were selected persons.

(*d*) The preliminary enumeration commenced on the 16th January 1901 and was completed on the 31st January 1901.

(*e*) The final enumeration was carried out under the superintendence of the President and Charge Superintendents.

(*f*) The summaries were completed and despatchedon the 6th March 1901 to the Deputy Commissioner, Thatôn.

(*g*) Among the Charge Superintendents Mr. Godber and Maung Shaung did invaluable work. Among the Supervisors Maung Wuna, a ward headman, was conspicuous in dealing with the Binhlaing quarter. The festival was under Maung Chit Tun's charge. He, as Secretary, had a great deal of supervision beyond this. It was owing to his exertions that the streets were deserted during the Census and that the enumeration was so quickly concluded.

Owing to preliminary hitches, I found it necessary to appoint a number of headquarter clerks as Enumerators in Lewe-in and other circles. Among these the following were pre-eminent, though all worked well :—

Maung Po Yin.	Maung Ba Thaw.
Maung Cho.	Maung Aung Gyi.
Maung Po Yin.	Maung Sein Thwin.
Maung Po Maung.	Maung Tun Hla.
Maung Chit Swe.	Maung Chan Nyein.

From K. G. BURNE, Esq., Deputy Commissioner, Amherst, to the Superintendent, Census Operations, Burma,—No. 2864—10-47, dated the 23rd April 1901.

I have the honour, with reference to your Circular No. 24 of 1901 (Census Department No. 223—51C., of the 18th Januaryat last), to submit the following report.

* * * * *

MOULMEIN TOWN.

The town for Census purposes was divided into two charges under two Charge Superintendents, the Secretary and Engineer to the Municipality being the one for the northern portion, and Mr. E. C. S. Shuttleworth being the other for the southern portion.

* * * * *

Each Supervisor was supplied with a map of his circle. Circle lists with maps were prepared in accordance with the instructions given in Circular No. 8 and were in the hands of the Supervisors by the 15th November. Both the abstracts of the general town register and the map were submitted to the the Superintendent, Census Operations, in August 1900.

* * * * *

(*b*) House-numbering commenced in November and was completed by the end of November. The numbering carried out for Municipal purposes was found not to be generally suitable for Census operations, so houses had to be re-numbered. * * *

(*c*) *Agency employed.*—The town was divided into two charges—northern and southern—one Superintendent for each, with a total of 275 Supervisors and Enumerators, mostly consisting of officials and headmen of wards, but many of the latter proved, from insufficient education, useless for the work, and their places were taken by ordinary citizens, such as brokers and others.

(*d*) *Preliminary enumeration.*—In the northern division the preliminary work commenced on the 6th February and was completed on the 10th, and thoroughly tested on the 12th and 13th. In the southern the preliminary work commenced on the 15th, and was completed on the 27th.

As to testing, this was done by the Charge Superintendents and myself.

* * * * *

In a future Census I think it would be better, if the Census taking is to be in towns in the busiest part of the year, to make mill-owners Census officers. It would also be well to make all occupiers of houses living in seperate compounds fill up a schedule for their household and servants.

(*e*) *Final enumeration.*—The work was, I think, satisfactorily performed. * * *

It gives me pleasure to mention the names of the following:—

NORTHERN.

Mr. R. P. Wilcox, Secretary and Engineer, Municipality.

Maung Po Thaung, *Akunwun,* Municipal office (since resigned), who did excellent service.

M. Mohamed Shaw, H. Hutton, W. H. Gay, Maung Po Pe, G. Gwan Teik, Maung Chit Kaing, Maung Kyi Maung, Maung Po Kin, Maung Hman, Maung Kin, Maung Po Yin, Maung Tha Han.

SOUTHERN.

Mr. E. C. S. Shuttleworth, Assistant Superintendent of Police.

Maung San Nyi, Inspector of Police.

Thatia Naidu, Interpreter and Headman of ward.

Maung Kaing, Maung Aung Myat, Mr Abreu in charge of Distillery.

(*f*) *Preparation of the district, charge andtcircle summaries.*—The procedure laid down in Chapter XII was followed and everything was completed for the preparation of the district totals by the 5th March.

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(*h*) There were no prosecutions.

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(*i*) The total cost of the operations amounted to Rs. 21-15-5.

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AMHERST DISTRICT.

(*a*) *Preparation of general register of villages or towns and of circle lists.*— * *

* * * * *

On receipt of Revenue Department No. 112—3C.-1, dated the 6th April, after carefully digesting its contents, Subdivisional Officers and Township Officers were summoned to to headquarters and the preparation of the register discussed. After return to their respective charges the register was prepared, but before the register was accepted as satisfactory several more meetings took place and references had to be made to correct errors and omissions.

* * * * *

Village maps were prepared by Revenue Surveyors in the settled tract, and, as well as could be done, for the unsurveyed tract. * * *

Each Supervisor was provided with one and they had to see that in going round a village no house or building likely to be inhabited on the night of the Census was omitted from the map.

* * * * *

When the general register was completed an abstract was submitted to the Superintendent of Census.

The circle list was, before final adoption, subjected to much testing.

(*b*) *House-numbering.*—The date of commencement and completion in each case was as follows:—

Moulmein subdivision.

Commenced on the 30th November; completed on the 14th December.

Amherst subdivision.

Commenced on the 1st October as regards Wagaru and Bilugyun, on the 15th October as regards Zaya and Yelamaing; completed on the 15th November.

Kawkareik subdivision.

Commenced in October for synchronous and non-synchronous tracts; completed at the end of November for the former and the middle of December for the latter.

(*c*) *Agency employed.*—Eleven Charge Superintendents, 99 Supervisors, and 1,112 Enumerators.

As regards Charge Superintendents and Supervisors, they consisted of officials, Township Officers, Inspectors of Land Records, Revenue Surveyors, &c., and for Enumerators, village headmen and ten-house *gaungs*; but when the latter were illiterate, then teachers and literate agriculturists, &c.

(*d*) *Preliminary enumeration.*—This commenced on the 15th January and was over by the 31st. The work done in testing was not only extensive but thorough.

* * * * *

(*e*) *Final enumeration.*—It is difficult to select, as all, except two or three, gave full satisfaction. Amongst those who deserve special mention are.—

Charge Superintendents.

Maung Pe, Township Officer, Ataran.
Maung Shwe Thein, pensioned Police Inspector.
Maung Kauk, Headman, Kawkareik.
Maung Po Ka, Township Officer, Wagaru.

Supervisors.

Maung Tun Tha, Forest Ranger.
Maung Tun Aung, Maung Shwe Than } 1st class Constables.
Maung Saik Te, Circle Thugyi.
Maung Kin, Kyonkadat.
Maung Auk Pan of Budagôn.
Maung Ta Dut, Thugyi of Tagundaing.
Maung Po Hnya, Thugyi of Kalwi.
Maung Po Hein of Kamamo.
Maung Po Kin of Sebala.
Maung Tha E, Thugyi of Kado.
Maung Gyi, Thugyi of Kawtun.

Enumerators.

Muhammad Sultan, Clerk, Subdivisional Officer's Court, Kawkareik.

* * * * *

(*f*) *Preparation of the district, charge and circle summaries.*—The arrangements generally were as follows. On the morning following the final enumeration the Enumerators had to go to a selected "rendezvous" where they met their Supervisors, and checking was done. The Supervisors and Enumerators then met the Charge Superintendent, when checking was again gone through and the charge summaries prepared, and special messengers, arranged beforehand, employed to proceed with the figures to the Subdivisional Officer, who arranged that they should reach the hands of the Deputy Commissioner by wire. The result was, I was able to wire the district totals on the 6th.

* * * * *

(*g*) *The operations in non-synchronous tracts.*—Having settled upon the tract and receiving the approval of the Superintendent of Census, I was able to employ 43 police constables to assist as Enumerators in addition to others selected from literate villagers.

The Charge Superintendent and Supervisors were all, except four, Government servants.

The difficulties that had to be combated were more difficulties of communication, owing to the wild nature of the country in parts, and it was necessary to employ police.

The figures obtained may be regarded at any rate as approximately correct.

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(*h*) There were no prosecutions and the attitude of the people was quite satisfactory.

* * * * *

(*i*) The total cost of the operations amounted to Rs. 407-10-6.

(*j*) I believe the results obtained are fairly correct.

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In conclusion I beg to bring to notice the services rendered by Subdivisional Officer Maung Ngwe Kaing in checking the schedules and totals, which enabled me to get the figures in by the 6th March. He worked early and late and thoroughly.

* * * * *

From Commander G. A. Rose, R.I.M., Port Officer, Moulmein, to the Deputy Commissioner, Amherst,—No. 2479—S.-34, dated the 15th March 1901.

I have the honour to acknowledge receipt of a copy of Census Circular No. 24 of 1901 and to submit my report in connection with the Census operations on the river which came under my orders.

(*a*) *The preparation of the circle list* necessitated no small amount of labour, as I had to obtain a sketch of the foreshore and demarcate same to avoid any mistakes about boundary limits on the Census night.

(*b*) *Boat-numbering.*—None was made, as boats had been numbered when taking out licenses and they are constantly moving about.

(*c*) The Port Officer was the Charge Superintendent.

* * * * *

(*e*) The work carried out by each Supervisor and Enumerator was to my satisfaction.

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(*f*) The circle summaries, together with the charge summary, were sent to the President of the Moulmein Municipality on the morning of the 2nd and a supplementary one on the 5th March 1901, the S.S. *Maharani's* figures having only been received on the 4th afternoon.

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(*h*) There were no prosecutions.

* * * * *

(*i*) The total cost in connection with the river Census is as follows:—

	Rs.	a.	p.
Boat-hire	61	15	0
Cost of lamps	5	10	0
Cost of stores	1	7	1
Cost of ink-bottles	6	4	0
Cost of gharry-hire	4	0	0
Total ...	79	4	1

This was paid from the Port fund.

* * * * *

From Captain H. N. Warde, Deputy Commissioner, Tavoy, to the Superintendent, Census Operations Burma,—No. 675-5C., dated the 25th March 1901.

In compliance with Circular No. 24 of 1901, I have the honour to forward a brief report on the Census operations under the different heads called for.

(*a*) *The preparation of the general register of villages or towns and of the circle list.*—No special remark is necessary. The orders were duly carried out without any difficulty. The map was prepared by the Land Records Department.

(*b*) *House-numbering.*—The house-numbering commenced about the 15th October 1900 and was completed throughout most of the district by the 30th November. It was noticeable that the love of art in the Burmese character showed itself in the making of carved boards in places for the house numbers.

(*c*) *The agency employed.*—Seven Charge Superintendents (6 for the district and 1 for the town), 91 Supervisors and 894 Enumerators were employed.

The Charge Superintendents for the district were all Myoôks and Inspectors of Land Records. The Circle Supervisors were mostly *taikthugyis*, some were village headmen, revenue surveyors, *taiksayes*, police sergeants, and Myoôks' clerks. The Enumerators were generally headmen, and ten-house *gaungs*, and respectable persons who could write and who were willing to take up the duty.

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(*d*) *Preliminary enumeration.*—The enumeration was commenced on the 15th January 1901 and was completed in the first week of February. Much useful work was done in testing by the district officials.

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(*e*) *The final enumeration.*—I consider the quality of the work performed was generally adequate. As to the Charge Superintendents, Maung Lu Han had the most important and populous, charge, namely the town, and his work, which the Census Superintendent checked personally, is, I consider, worthy of special mention and praise. Of the other Charge Superintendents, Maung Tha Zan U, Maung Shwe Chaung, Maung Shwe Myu, and Maung Thein Maung, all deserve credit for the way they carried out their duties.

(*f*) *The preparation of District and charge summaries.*—These were prepared according to the orders and no serious hitch took place. * * *

(*g*) *The operations in non-synchronous areas.—Central township.*—For the villages of Aungthawara, Ayu, Amya, and Sinbyudaing the enumeration was taken on the 29th December 1900 and completed on the 15th February 1901.

For the villages in the Kyauktwin and Kamaungthwè circles the enumeration commenced on the 1st January and was completed on the 15th February 1901.

South-eastern township.—For the non-synchronous villages in the South-eastern township the enumeration commenced on the 11th January and was completed on the 15th of the following month.

No special difficulty arose in the non-synchronous enumeration, intelligent officers being appointed as Enumerators for each charge.

(*h*) *Prosecutions under the Act.*—There were no prosecutions under the Act. * * *

(*i*) The total cost of the operations was Rs. 251-11-6.

(*j*) *The correctness or otherwise of the results obtained.*—As the work was carried out with care and properly supervised, it is I think, fair to hold that the figures for this district are as correct as Census figures ordinarily are.

(*k*) *Vital statistics.*—These statistics show that from the year 1891 the births have largely out numbered the deaths, the figures being 27,380 births as against 15,012 deaths which is very satisfactory. * * *

In conclusion I desire to express my appreciation of my chief clerk Mr. Gallope's service. The Census has put a great deal of extra work on him, and he has worked loyally and indefatigably to ensure its success.

Maung Po Thein, who was appointed as special officer to check the figures, gave a good deal of his time to the work.

From D. Ross, Esq., Deputy Commissioner, Mergui, to the Superintendent, Census Operations, Burma,—No. 245, dated the 25th March 1901.

As requested in your letter No. 223-51—C. O., dated the 18th January 1901, I have the honour to forward herewith a brief report on the Census operations generally in the Mergui district.

(*a*) *The preparation of the general register of villages or towns and of the circle list.*—This work has completed long before my time. It was carried out as directed in the instructions.

* * * * *

(b) House-numbering.—House-numbering commenced on the 1st October and was completed by the end of November.

* * * * *

(*c*) *The agency employed.*—Including the non-synchronous tracts we had eight Charge Superintendents, 39 Supervisors, and 543 Enumerators.

The Charge Superintendents were the Township Officers, and for the Selongs and the pearling fleet the work was entrusted to the late Mr. Clogstoun, District Superintendent of Police, and the *Akunwun* Maung U respectively.

The Supervisors were Revenue Surveyors and Inspectors were available, and in other places *taikthugyis* clerks, &c., were employed.

Enumerators were drawn from all classes.

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(d) The Preliminary enumeration; work done in testing it, &c.—The preiminary enumeration was completed in most places, though not in all, by the 15th February. It was finally completed everywhere by the 28th February.

* * * * *

(*e*) *The final enumeration.*—As regards the final enumeration there is little that I can usefully say, except that no pains were spared to make it a success, and both myself and my officers confindently expected to be able to despath our telegram on the evening of the 5th March. The launch got back to Mergui on the 3rd, bringing the charge summaries from the Maliwun subdivision, the Bokpyin township, the Ye-e circle of Mergui township, and the Southern and Central Selongs. * * * I found that the Palaw totals were delayed for want of the results from the Tanyet-kwin circle (*Taikthugyi* Maung Kya Yon). * * * The Township Officer of Palaw arrived on the 5th, but the Tanyet-kayin Supervisor did not produce summary till late on the evening of the 8th.

* * * * *

For my officer I have nothing but praise. All the Township Officers, Revenue inspectors and surveyors worked well and took the most lively interest in their duties. *Taikthugyis*, when employed, also did well. Mr. Carrapiet, Subdivisional Officer, Mergui, had much work to do and did it well. Mr. Gahan, Treasury Officer, had charge of the Municipality and Port Census. He was also charged with the checking and preparation of the district summary. His work was careful and good throughout and he did not spare himself any trouble.

The troublesome enumeration of the Selongs was carried out by the late Mr. R. P. Clogstoun, District Superintendent of Police, who made careful and successful plans.

* * * * *

The pearling fleet was sucessfully censused under the orders of the *Akunwun* Maung U.

Maung Maung, Township Officer of Bôkpyin, and Mr. D. L. Richardson respectively carried out the non-synchronous census of the Bôkpyin and Maliwun townships. I think that all the officers I have named, as well as Maung Ko, Township Officer, Mergui, Maung Shan Byu, Township Officer, Palaw, and Maung So, Township Officer, Tenasserim are worthy of honourable mention.

* * * * *

(*g*) *The Operations in non-synchronous areas.*—The non-synchronous areas were—

(1) The Maliwun township.
(2) The Lenya township
(3) The Pawut circle of the Tenasserim township.
(4) The Selongs.

In Maliwun the enumeration was commenced on the 11th February and was completed on the 27th February. The villages from Hak-kok northward were enumerated by the Subdivisional Officer with the help of the Forest-guard, Maung San Dun; from Maliwun tin-mines to Victora Point by M. A. Musaji, the Customs clerk; from Paluton-ton northwards along the sea-coast by Mr. Walkey, Sub-divisional Police Officer, assisted by Sergeant Maung Ba Pe.

The Township Officer, Lenya, has not reported fully on the points referred to in the heading to this paragraph. He employed nine Enumerators. The work was commenced on the 1st February and was completed by the 19th. A severe epidemic of small-pox raged at the time of enumeration, the popole fled into the jungles, and there was much trouble in finding some of them. The Pawut circle of Tenasserim was enumerated by the Myoôk's second clerk. He commenced on the 4th February and had finished by the 24th. The enumeration of the Selongs was carried out by the late Mr. Clogstoun.

* * * * *

(*h*) *Prosecutions under the Act.*—There were no prosecutions. Some Chinese carpenters, probably from ignorance, were insolent to the Enumerator and their prosecution was proposed, but when I discovered that Commissioner's sanction was necessary before a prosecution could be started the idea was abandoned.

* * * * *

(*i*) *The total actual cost of the operations.*—The actual amount of money spent and paid away in the district was Rs. 338-13-4.

From Captain S. L. APLIN, Deputy Commissioner, Thayetmyo, to the Superintendent, Census Operations Burma,—No. 1676-Census, dated the 18th March 1901.

WITH reference to Circular No. 24 of 1901, I have the honour to report as follows:—

(*a*) The preparation of the general register of villages and towns and of the circle lists was carried out in accordance with the instructions. The Deputy Commissioner, Subdivisional Officers, and Township Officers verified a large number of entries.

(*b*) House-numbering commenced on different dates in different parts of the districts, the earliest date being the 10th October. It was all completed before the end of November.

(*c*) *Agency employed* (*excluding Cantonments and Sudder bazaar*).—The total numbers were as follows:—

	Number.
Charge Superintendents	10
Supervisors	148
Enumerators	1,776

(*d*) The preliminary enumeration was commenced on the 18th January and completed on the 10th February.

(*e*) *The final enumeration.*—All officers did their best to ensure accuracy and the prompt despatch of the final results to headquarters. The following officers, however, deserve special mention:—

Among the Subdivisional Officers Maung Tha No deserves special mention for the keen and intelligent interest he has taken in the operations from the commencement and for the

excellent arrangements he made for the prompt submission to headquarters of the summaries, &c., from the more distant parts of his subdivision. All the Charge Superintendents did excellent work, and it is difficult to select one in preference to another ; but the following officers were specially noticeable for the pains they took to secure good results in their respective charges :—

Mr. Murray, Assistant Superintendent of Police.
Myoôk Maung Tha Mo.
Myoôk Maung Ba Than.

In addition I would specially mention my Chief Clerk Maung Po Lun, who has from first to last rendered me the greatest assistance.

(*f*) The district, charge and circle summaries were prepared in accordance with the instructions. The arrangements made for the early submission of data for the provisional totals were most successful. Extensive use was made of the mounted police, who proved themselves most useful. Last Census part of the old Taingda township was treated as a non-synchronous area, but this year there were no special tracts. There was some danger of the figures for some of the more distant parts of the district not reaching the district headquarters in time for the district totals to be telegraphed to Rangoon and Calcutta before the 7th March, and, in case the arrangements made should prove defective, copies of the preliminary record were prepared for submission to headquarters. The arrangements made, however, did not fail in any single instance. Most of the circle snmmaries, &c., reached the district headquarters on Sunday, the 3rd March, and none (for the district) were later than Monday morning.

(*g*) *Non-synchronous areas.*—Nil.

(*h*) *Prosecutions.*—Nil.

The ttitude of the people towards the operations was as a rule one of passive indifference. They did not give much assistance, but on the other hand did not create difficulties and, generally speaking, obeyed all the directions they received without murmur or complaint.

(*i*) The total cost of the operations, exclusive of the cost of forms, stationery, and the like supplied by the Census office, was Rs. 34-5-6.

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(*k*) *Vital statistics.*—There have been no epedemics which affected the total population, and every year the births have been (except in 1894) far more numerous than the deaths. In spite of this the population for the district is some 10,284 less than when the last Census was taken. The reason for this is that at this season of the year large numbers of men from this district flock to the delta, where they can find remunerative employment as coolies. During the rains these men return to their homes.

Emigration and immigration.—Beyond the temyorary emigration to Lower Burma referred to in the last paragraph there has been little emigration from, or imigration into, this district.

From J. D. FRASER, Esq., I.C.S., Deputy Commissioner, Pakôkku, to the Superintendent, Census Operations, Burma,—No. 1093-C.—3, dated the 3rd April 1901.

In accordance with the instructions contained in your Circular No. 24 of 1901, I have the honour to submit a report on the Census operations in this district.

(*a*) Each Township Officer prepared a list of villages for his township immediately after the issue of orders last May, and, had the extact position of these villages been known, there would have been no difficulty in at once dividing the township or charge into circles. Unfortunately there was no accurate map of the district in existence, numerous villages did not appear at all on the map, and it was quite impossible to distribute into circles : in other cases hamlets appeared on the map at improbable distances from their headman's vilalge with other intervening hamlets and villages. It was essential to obtain a map showing the real position of all villages in the charge, and with this object each Township Officer was supplied with a 1-inch map of his charge with all known villages entered * * * to be brought up to date. The location of all villages and hamlets took a considerable time, aud it was only at the beginning of November that the Deputy Commissioner was in a position to mark off each charge into circles.

* * * * *

(*b*) House-numbering was carried out in November. Some confusion occurred in Seikpyu township through the issue in September of seperate instructions for numbering *thathamede* houses. * * *.

(*c*) There are eight townships in the district and the Township Officer was appointed Charge Superintendent in each case. * * *. Supervisors and Enumerators were, with a few exceptions, village headmen. * * *. In all there were employed nine Charge Superintendents, 194 Circle Supervisors, and 2,245 Block Enumerators.

(*d*) Preliminary enumeration commenced at the middle of January and was generally completed by the 15th February. * * * I found an extreme reluctance to make a beginning on the printed forms ; in Tilin township all the entries were first made on spare paper and were all checked by the Charge Superintendent before transfer to the printed forms.

(*e*) All the Charge Superintendents took a keen interest in their work.

(*f*) Maung Po Hla, Subdivisional Officer, Pakôkku, was put in charge of the special work of preparation of the district summary.

The priliminary figures were adopted for the Gangaw, Tilin, asôk, and Seikpyu charges.

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(*h*) There were no prosecutions ; the attitude of the people was generally one, of absolute indifference. In Pakôkku town, I was told, some of the low class natives of India gave trouble by reluctance to answer questions.

(*i*) The total cost of the operations was Rs. 149-6-0, comprised as follows :—

	Rs.	A.	P.
(1) Cart and cooly hire, &c.	50	14	0
(2) Freight	1	0	0
(3) Travelling expenses	97	8	0

(*j*) It is possible that a few travellers escaped Census, but I should put the proportion as low as 1 per cent

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Census Report for the Minbu District by H. S. PRATT, Esq., I.C.S., Officiating Deputy Commissioner.

(*a*) *General Register, Form A.*—The first 100 copies were received on the 17th April On the 25th April a manuscript form of list of villages was sent to Subdivisional Officers with instructions for verification on the 7th June. General Register, Form A, with Census map and instructions, were sent to the Subdivisional Officers to verify and fill in omissions.

* * * * *

Census Circular No. 8 of 1900, regarding circle lists was received on the 7th September. * * * Circle list forms were received on the 11th October 1900. Circle lists and maps were prepared and sent to the Subdivisional Officers, to be given to the Charge Superintendents, on the 20th October.

I consider it was a mistake to attempt to prepare the general register in the district office in the rough. Had the Subdivisional Officers been instructed to draw up the register for their subdivisions at first instead of being asked to revise an erroneous and in some cases misleading list, the preparation of the register would have been completed much earliar than it actually was and would probably not have had to be returned * * *

(*b*) *House-numbering.*—Circular No. 10 of 1900 and Chapter 7 of the Census Code were received on the 5th October 1900 and issued with instructions to Subdivisional Officers on the 18th October 1900. No difficulty was experienced in house-numbering as all houses had been numbered in 1899 for general purposes, and all that was necessary in most cases was to revise and re-arrange existing numbers.

The numbering of houses began in October and was completed in December.

* * * * *

(*d*) *The priliminary enumeration.*—In the Sidôktaya township and in a large portion of the Salin township the preliminary Census was made roughly on *parabaiks* long before the receipt of the schedules, so that where this had been done, when the schedules came, the entries had merely to be copied into them and the preliminary Census was complete. This was also done in places in the Minbu subdivision

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The preliminary Census began in the rural tracts in the beginning of January and was competed about the middle of February.

* * * * *

(*e*) The final enumeration began on the 1st March at dusk and was completed before day break in all instances.

The Salin Municipal charge summary, circle summaries, and block abstracts and schedules were received at Minbu on the 3rd March. The charge summary for Salin township north and south, came in on the 4th March and the 6th March, Minbu town, 7th March, Sagu, 7th March, Ngapè, 9th March, and Legaing, 10th March. It will be seen that the whole of the summaries in the Salin subdivision were received in Minbu before any for the Minbu subdivision Even the figures for Sidôktaya, where arrangements for provisional totals, if necessary, had been made, where in good time. * * * Of Charge Superintendents by far the best work was done by Maung Aung Kho, Additional Township Officer, Salin, who was in charge of the operations for Salin town, and Maung Shwe Pôn, Land Records Inspec-

tor, Charge Superintendent, Sidôktaya. Maung Aung Kho threw himself, heart and soul, into his work, and both he and Maung Swe Pòn deserve great credit. Mr. Beale, Subdivisional Officer, Minbu, practically took the whole control of the Census of the Shwezettaw festival into his own hands and spared no trouble to secure the accuracy of the returns. Mr. Stirling, Executive Engineer, in charge of Irrigation Works at Aingma, rendered invaluable service in personally superintending the Census of the irrigation employès and their dependents.

* * * * *

(*f*) Mr. Beale, Subdivisional Officer, Minbu, was appointed special officer for the preparation of district charge totals.

The Minbu subdivision total were all late and the Ngape and Legaing charges kept the figures for the district waiting for an undue period.

There was absolutely no reason why the totals for all charges in the district should not have been in in time had the Charge Superintendents done their work efficiently from the commencement. All Charge Superintendents and Supervisors were supplied with cyclostyled copies of the form for summaries in addition to the printed form to prevent mistakes.

* * * * *

(*h*) No prosecutions were instituted under the Act. * * * The attitude of the people towards the operations generally was good, and I found every one asked willing to give assistance. The advocates in Salin gave great assistance and their services and those of their clerks were freely utilized.

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(*i*) The total cost of the operations, so far as can be ascertained, is Rs. 12-14-0, contingent charges.

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(*j*) There is every reason to believe that the general results obtained give as correct an account of the population of the district on March 1st as can be obtained.

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(*l*) There appears to have been a movement of agricultural labourers from Salin township to Lower Burma and a tendency to settle there permanently, but the data on this point are inadequate and I am unable to give any detailed information.

* * * * *

From H. G. Batten, Esq., Deputy Commissioner, Magwe, to the Superintendent, Census Operations, Burma,—No. 1168-4H., dated the 27th March 1901.

I have the honour to report that I am submitting my Census schedules for this district, and, as requested in your Circular No. 24 of 1901, beg to make the following remarks on points noted:—

(*a*) The first intimation received regarding Census operations was the receipt of 100 forms of the general register of villages from the Superintendent, Government Printing, Burma, on the 17th April 1900.

* * * * *

By the 20th of June the general register of villages was completed for the whole district and despatched to each Township Officer for check and for filling in names of persons suited to be appointed as Supervisors and Enumerators, and for the division of the villages into Census circles.

* * * * *

By the 11th August all the registers were returned to this office and a Census map was prepared showing the distribution of charges and circles.

* * * * *

Circle lists.—The orders for the preparation of the circle lists were received on the 7th September and the preparation of the lists and circle maps was at once taken in hand, as also the appointment orders for Supervisors and Enumerators.

* * * * *

Register of towns.—Orders for its preparation was received on the 27th July, and the Superintendent, Government Printing, was asked by telegram to supply the necessary forms. On receipt, the necessary entries were made and the registers issued on the 8th August On return from Charge Superintendents with the names of Supervisors and Enumerators selected and division into circles, maps were prepared and submitted to the Superintendent with abstract of General Towns Register on the 12th September.

(1) Magwe.
(2) Taungdwingyi.
(3) Yenangyaung.

Circle lists.—Towns.—On the 15th October forms were received; they were duly prepared and distributed with maps and appointment orders for Supervisors and Enumerators on the 19th October.

(*b*) *House numbering.*—The orders regarding this were received on the 8th October, though the circle lists had only been received on the 4th October, having been indented for on the 7th September. I, however, at once issued orders for the commencement of the house numbering.

* * * * *

In Natmauk and Myothit the numbering was kept back till I had myself personally instructed the Supervisors and Enumerators, myself numbering certain villages in the presence of all concerned.

* * * * *

(*c*) *The agency employed.*—Charge Superintendents were the Township Officers, excepting the Agents, Bombay Burma Trading Coporation, Limited, and Burma Oil Company, and Military Police, Magwe.

Supervisors were chiefly village headmen or Government employés and Enumerators were chosen from amongst the sharpest men of the villages chosen by the Supervisors or Charge Superintendents.

* * * * *

On the whole I found that both Supervisors and Enumerators worked willingly and well, and that the result is more satisfactory than could have been expected from the material available.

(*d*) *The preliminary enumeration.*—This was considerably delayed owing to the non receipt in sufficient time of forms and instructions and stationery.

The general schedules, front and back covers, and block lists were not received till the 2nd January 1901, though despatch was advised on the 19th December 1900.

* * * * *

The preliminary enumeration was ordered to be commenced on the 15th January.

* * * * *

The forms were distributed as soon as received, and Charge Superintendents were directed to allow of no delay in the forms reaching the hands of the Enumerators.

* * * * *

For future Census it would be advisable to arrange for the issue of ink in small bottles the black in bottles of a shape common for sale in every bazaar, or better still, indelible ink pencils as used in the telegraphs, and the red ink in small narrow-necked bottles which could be suspended by a string to the Enumerator's jacket, the string being passed through the cork by which to extract the same.

* * * * *

I would also suggest that all orders and circulars and forms should be printed both in Burmese and English, and a sufficient number issued, so as to prevent the necessity of copies having to be made in district offices.

* * * * *

(*e*) *The final enumeration.*—The quality of the work performed has been on the whole very satisfactory, and I do not think that it will be found that the returns are unsatisfactory.

* * * * *

Thanks are specially due to Mr. Heald, I.C.S., Subdivisional Officer, Taungdwingyi, for his supervision of the work in the Taungdwingyi subdivision, and to Maung Po Sein, Township Officer, Taungdwingyi.

* * * * *

Maung Kyaw Kaing, Headquarters Myoôk, Magwe, took special pains in supervising the work in Magwe town, and Maung Bo, Township Officer, Myingun, who had to take up the work after it was started in Myingyun township, did extremely well.

I am indebted to Mr. Ameen, Agent, Burma Oil Company, Yenangyaung, for his assistance.

* * * * *

All Government clerks have had extra work thrown on them and have responded loyally.

Mr. Robson, my Chief Clerk, who has had charge of the Census work generally, has given me very great assistance and has added much to the general efficiency by his supervision, and for this he has my best thanks, as also his assistants, Maung Po Han, Maung Khwet, and Maung Bo.

* * * * *

(*f*) *The preparation of the district, charge, and circle summaries.*—Special arrangements were made for the early collection of the charge and circle summaries. Charge Superintendents waited at convenient centres, and the circle summaries were collected and sent in by mounted messengers. The totals from Natmauk and Myothit were sent in by special messengers to the Subdivisional Officer, Taungdwingyi, who wired totals for his subdivision generally.

The totals from Yenangyaung were wired direct, and the totals for Magwe town and township and Myingun township were received direct.

* * * * *

I was able to submit my district totals, excepting the Bombay Burma Trading Corporation, Limited, to the Superintendent, Census Operations, Rangoon, and to the Census Commissioner, Calcutta, by the afternoon of the 4th March, and next day was able to wire the complete total.

* * * * *

(*g*) *The operations in non-synchronous areas.*—There were no non-synchronous areas, and the whole final enumeration was practically completed on the night of the 1st March.

(*h*) *Prosecutions under the Act.*—There were no prosecutions necessary and the attitude of the people towards the operations was friendly and showed a certain amount of apathetic curiosity.

* * * * *

(*i*) *The total actual cost of the operations.*—The expenditure under this head was Rs. 157-10-0 for the whole district.

* * * * *

(*j*) *The correctness or otherwise of the results obtained.*—I would note that, as far as possible, I myself did what I could to push on and check the Census operations.

* * * * *

As far as my own experience goes, and this being my fourth Census, I consider the work has been very satisfactory.

* * * * *

The district total is an increase of 27,000 over the returns of 1891, and in my opinion, this is about what the increase has been.

* * * * *

(*k*) *Vital statistics.*—During the decade there has been only one serious outbreak of cholera.

* * * * *

There is no registration of births in this district except within the municipal limits of Taungdwingyi, and the registration of deaths only commenced in April 1899.

(*l*) *Emigration and immigration.*—During the past 10 years there has been a constant emigration and immigration throughout the district, but chiefly in the Taungdwingyi subdivision.

* * * * *

From Major W. A. W. STRICKLAND, Deputy Commissioner, Mandalay, to the Superintendent, Census Operations, Burma,—No. 2273-1C., dated the 6th May 1901.

With reference to Census Department Circular No. 24, dated the 18th January 1901, I have the honour to report as follows on the Census operations in this district.

(*a*) *The general village registers and circle lists.*—These were prepared at Mandalay at the office of the Superintendent of Land Records and sent to Subdivisional Officers for check and return, and finally distributed to Charge Superintendents between the 7th and 13th November 1900, with full instructions in detail for their guidance, explaining the nature and importance of the work devolving on each of them.

(*b*) *House-numbering.*—The following table gives the date of commencement and completion of the house-numbering both in the town and district.

* * * * *

Charge.	Date of commencement.	Date of completion.
Mandalay Town, north	27th November 1900 ...	4th December 1900.
Mandalay Town, south	27th November 1900 ...	21st December 1900.
Mandalay Town, east	27th November 1900 ...	4th December 1900.
Mandalay Town west	25th November 1900 ...	23rd December 1900.
Mandalay Cantonments	1st December 1900 ...	17th December 1900.
Maymyo subdivision	13th September 1900 ...	28th October 1900.
Amarapura subdivision	17th November 1900 ...	20th November 1900.
Madaya subdivision	8th December 1900 ...	31st December 1900.

* * * * *

(*c*) *Agency employed.*—The charge Superintendents in Mandalay were the Eastern and Western Subdivisional Officers, the *Akunwun* of the Deputy Commissioner's office, the Registrar of Town Lots, and the Cantonment Magistrate (for the civil portion of the Cantonments). Captain R. J. Savi of the 30th M. I. (5th Burma Battalion) was the Charge Superintendent of the Military portion of the Cantonment.

In this district Township Officers were appointed Charge Superintendents.

The Supervisors and Enumerators were Government clerks, thugyis, revenue surveyors, village thugyis, thugyis' clerks, cultivators, traders, and villagers.

* * * * *

(*d*) *Preliminary enumeration.*—The following table gives the dates of the commencement and completion of the preliminary enumeration:—

Station or subdivision.	Date of commencement.	Date of completion.
Mandalay Town	1st February 1901 ...	22nd February 1901.
Mandalay Cantonments	2nd February 1901 ...	15th February 1901.
Maymyo	20th January 1901 ...	20th February 1901.
Amarapura	1st February 1901 ...	21st February 1901.
Madaya	1st February 1901 ...	25th February 1901.

In the rural tracts of the Amarapura subdivision the preliminary enumeration commenced on the 15th January and was completed on the 20th February.

* * * * *

With regard to the enumeration in the district some trouble was experienced in the Maymyo and Amarapura subdivisions. In the former difficulties arose when Burman Enumerators had to enumerate natives of India. There was trouble in getting entries at all and, when obtained, the data as regards race, religion, and birth-place were invariably wrong. The Charge Superintendents were unable to correct these errors and the Subdivisional Officer and his Clerk had therefore to question each native of India personally to obtain accurate information. Even those Enumerators who were themselves Natives of India had to be closely supervised to ensure accuracy. Apart from this the only other difficulty that presented itself was in filling up the occupation columns of the schedules; this was unfortunately increased by the mistranslation of a circular which directed Enumerators to enter the household occupation of women and children. In many enumeration books this column had to be entirely rewritten.

* * * * *

(*e*) *Final enumeration.*—I am of opinion that the Census operations of this district were carried out in a most satisfactory manner. * * * I do not think better results could have been obtained had a specially paid staff been employed. I attach a separate list giving the names of those who have been selected for special commendation and trust that their good work will be suitably noticed.

(*f*) *Preparation of district, charge, and circle summaries.*—In Mandalay the schedules were checked on the morning of the 2nd March by all Charge Superintendents and Supervisors and the circle and charge summaries prepared and completed on the 3rd.

In the district the following procedure was adopted:—

In the Maymyo subdivision all Enumerators were ordered to take in their enumeration books to the Supervisor's headquarters as soon as the final enumeration had been completed. * * * The summaries and schedule books were then brought into the township headquarters on the morning of the 2nd March, and the final checking and totalling carried out. They were then sent on to the subdivisional headquarters, where they were scrutinized closely by the Subdivisional Officer and then sent on to Mandalay, where they arrived at noon on the 3rd March.

In the Madaya and Amarapura subdivisions no special measures were adopted; the returns of these subdivisions were promptly dealt with by the Subdivisional Officers, by whom they were carefully checked and despatched to Mandalay, where they were received at noon on the 3rd March.

(*g*) *Operations in non-synchronous areas.*—There were no non-synchronous areas in this district.

(*h*) *Prosecutions under the Act.*—There were no prosecutions under the Census Act. The people appeared to be indifferent as regards the operations. * * *

(*i*) *Total cost of operations.*—The total cost of the operations, excluding petty contingent charges, amounts to Rs. 177-0-8. * * *

(*j*) *Correctness of the returns.*—I have no reason to doubt that the work has been thoroughly and well done and that the results obtained are correct.

(*k*) *Vital statistics.*—There have been no epidemics of such a nature as to cause a material and noticeable decrease in the population prevalent in this district during the last decade.

* * * * *

(*l*) *Emigration and immigration.*—No details can be furnished in this connection. The percentage of natives of India in this district, especially in the town of Mandalay, has vastly increased during the past decade, but there appear to be very few who come here to settle permanently. Those that are here are merely birds of passage. * * *

List of Census officers and others selected for special commendation in the Mandalay district.

Name.	Occupation.	Remarks.
Mandalay.		
Maung Tha Nyo	*Akunwun*, Deputy Commissioner's office.	
Maung Po Ni	Western Subdivisional officer.	
Maung Chit Maung	First Revenue Writer, Deputy Commissioner's office.	
Maung Ba Thin	Stamp Clerk, Deputy Commissioner's office.	
Maung Po Chit	Second Judicial Clerk, Deputy Commissioner's office.	
Maung Khin	*Ayat Lugyi* of Pugyikyetthaye quarter.	
Maung Ngwe Bu	*Ayat Lugyi* of Megageri quarter.	
Maung Kywe	Head Clerk, Western Subdivisional Officer's office.	
Maung Tha Dun	*Ayat Lugyi* of Aungnanyeiktha quarter.	
Maung Myaing	*Ayat Lugyi* of Aunguanyeiktha quarter, west.	
Maung So	*Ayat Lugyi* of Aungnanyeiktha quarter, centre.	
Maung Cassim	*Ayat Lugyi* of Aungnanyeiktha quarter, centre.	
Maymyo.		
Maung Po Yit	Second Clerk, Subdivisional Officer's office.	
Maung Po	Thugyi of Maymyo.	
Pyintha.		
Maung Po Tôk	Township Officer.	
Amarapura.		
Maung Su	Head Clerk, Subdivisional Officer's office.	
Maung Tun Le	Second Clerk, Township Officer's office.	
Maung Lu Gyi	Head Clerk, Township Officer's office.	
Maung Myat Min	Revenue Surveyor.	
Maung San Nyun	Second Clerk, Subdivisional Officer's office.	
Maung Hla	Apprentice Clerk, Subdivisional Officer's office.	
Maung Sè	Apprentice Clerk, Township Officer's office.	
Madaya.		
Maung Thin	Township Officer, Madaya.	
Maung Swe	Revenue Surveyor.	
Maung Thaik	Revenue Surveyor.	
Maung Po Tu	Head Clerk, Subdivisional Officer's office.	
Maung Ba Gyi	Revenue Surveyor.	
Maung Tha Dok	Revenue Surveyor.	
Patheingyi.		
Maung Paw U	Revenue Surveyor.	
Maung Thaung	Revenue Surveyor.	
Maung Tu	Revenue Surveyor.	
Maung Gale	Township Officer.	

From N. G. CHOLMELEY, Esq., I.C.S., Deputy Commissioner, Bhamo, to the Superintendent, Census Operations, Burma,—No. 380-41, dated the 28th March 1901.

With reference to your Circular No. 24 of 1901, I have the honour to submit a brief report on the operations connected with the Census in this district.

* * * * *

The district was divided into four charges, comprising Bhamo town, the subdivisions of Bhamo, Shwegu, and the Kachin Hill Tracts. The latter, which at the time of the previous Census were estimated merely, were now treated as non-synchronous areas and were under the Superintendence of Mr. Rae, the Officer in charge of the Kachin Hill Tracts. The Bhamo and Shwegu charges fell to the care of their respective Subdivisional Officers, Mr. Skinner and, for Shwegu, Mr. Scott and Maung Sein Yo, the latter taking over a fortnight only before the Census. Mr. Skinner was only relieved of his treasury work in January, before which time he was unable to visit his charge. It will be seen, therefore, that the whole district, and each subdivision individually suffered from changes of officers at a critical time, which necessarily hampered the work. The chief difficulty to be overcome, however, lay in the difficulty of obtaining intelligent literate Enumerators. The Supervisors were almost all officials and thugyis, the former predominating, and the Enumerators almost all thugyis.

(*a*) The preparation of the general register of villages or towns and the circle lists was completed for the rural areas by the middle of July, and for the town of Bhamo by the middle of September.

* * * * *

(*b*) House-numbering commenced in Bhamo in October and was finished by the end of November. In Shwegu it commenced in the beginning of November and finished during the same month.

* * * * *

(*c*) The total number of Charge Superintendents for the synchronous tracts was three, of Supervisors 41, and of Enumerators, 324; of Supervisors 13 were clerks, seven were police officers, nine were village headmen, and the remainder various officials, such as district surveyor, Veterinary Assistant, bazaar-*gaung*, &c. The Enumerators were nearly all thugyis and *akwetôks*. The Charge Superintendents were two Myoôks for the rural area, and the Subdivisional Officers, Bhamo, for the town. The operations generally were in charge of Mr. Skinner, the Subdivisional Officer, Bhamo.

(*d*) Great delay occurred in supplying printed schedule forms to the district, owing apparently to the non-synchronous tracts having absorbed the entire provision for the district. The result was that the preliminary enumerations did not start till the 7th February, and was only completed on the 24th of that month. Considerable preliminary work had, however, been done on manuscript form.

(*e*) The greater part of the Supervisors did their work well and showed interest. The Bhamo Myoôk, Maung Tun Gywe, the Shwegu Myoôk, Maung Pyu, and the Subdivisional Officer, Shwegu, Maung Sein Yo, worked very well indeed, and Mr. Skinner, Subdivisional Officer, Bhamo, who supervised the whole operation, deserves high commendation.

(*f*) No special arrangements had to be made for the early submission of data for the provisional totals, but Subdivisional Officers and Township Officers had to work day and night to get the schedules properly checked in time.

(*g*) The non-synchronous and estimated areas formed about two-fifths of the total population of the district, 31,000 out of 79,000, but the estimated portion only amounted to some 1,500, and this was due to a mistake. The enumeration was conducted by seven special clerks, four of whom were half-educated Kachins, one a Shan clerk to the Civil Officer, Sinlum, and two Burmans. These went round either with the Civil Officer or with *taungôks* as they collected the tribute, and enumerated as well as they could. Operations commenced on the 1st December and finished by the 20th February. The Kachins at first viewed the whole thing with grave distrust as a thinly veiled attempt on the part of Government to extort more tribute out of them, but they ended by submitting to it without active opposition, though they never liked it much. The Enumerators all returned safely, bringing their schedules with them by the middle of February, with the exception of one Laby Naw, a Christian Kachin of Mr. Roberts' fold, who, after starting forth, completely disappeared, except for vague rumours that he had been heard of in various places preaching the Gospel. He eventually, on the 27th February, turned up, having enumerated less than half his circle, and being sent out again did not return till the middle of March. The result was tnat 49 villages had to be estimated.

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(*h*) and (*i*) There were no prosecutions under the Act, and the attitude of the people was quite passive, except as mentioned above in the non-synchronous tracts. The total cost of the operations amounted to Rs. 1,209-6-1.

(*j*) The results obtained in the synchronous area ought to be within a very small per centage of correctness; as pointed out above, the same cannot be said of the non-synchronous area.

(*k*) No vital statistics are kept. No epidemics affecting the total population have occurred in the last 10 years.

(*l*) A steady tide of immigration has been setting into the district during the last few years from the Chinese Shan States, especially from Möngwa and Santa, which are overcrowded and troubled by internal dissension. These States are peopled by a race consisting of Chinese blood grafted on a Shan stock, as the people of Bhamo district consist of Burmese blood grafted on a Shan stock. The former produces a much finer result. There is already a movement of Chinese and Shan State Shans into the small piece of country, called the triangle, which the late delimitation of the Frontier brought under our control, and this will continue until the tract is filled.

* * * * *

From Captain E. C. TOWNSEND, Deputy Commissioner, Myitkyina, to the Superintendent, Census Operations, Burma,—No.899-14G., dated the 1st April 1901.

In reply to your Census Department No. 223-51C.O., dated the 18th January 1901, I have the honour to submit the following report on Census operations in this district:—

(*a*) Instructions for the preparation of the General register of villages were issued on the 21st April 1900. * * * The registers were ready in this office on the 17th June. The circle lists were prepared and issued with maps on the 4th November.

(*b*) *House-numbering* commenced on the 1st November and was practically completed by the 25th December with the exception of the Jade Mines and Ruby Mines. Here the mining season does not commence until towards the end of December and, as new huts continue to be added until well on in March, the numbering did not commence until January and continued until the night of the Census. In Kamaing town itself several new houses had to be numbered after the preliminary enumeration. The material most generally used was lime or charcoal mixed with kerosene oil and this was found to be effective.

(*c*) *The agency employed.*—There were four Charge Superintendents. * * *

Of the 22 Supervisors five were Military Officers (for the Military Police and the 5th Burma Regiment), one an Assistant Engineer of the Burma Railways, and the rest *kayaingôks*, clerks, assistant school teachers, and one Deputy Forest Ranger. * * *

Two hundred and six Enumerators were employed; 32 were Native Officers and Noncomissioned Officers of the Military Police and 5th Burma Infantry, and the remainder were village headmen assisted by their clerks. * * *

(*d*) *The prelimniary enumeration.*—In most parts of the district this commenced on the 5th January and was completed by the end of that month.

* * * * *

I personally tested the preliminary enumeration in nearly all the villages round Lake Indawgyi and at Kamaing and Nanyaseik in the beginning of February, but was unable to visit any other synchronous tracts in the district.

(*e*) The Charge Superintendents remained at Myitkyina, Mogaung, and Kamaing respectively on the night of the Census and, assisted by every available clerk, supervised the Enumerators in the final enumeration. * * * It is difficult to choose any for special mention, but the following did the lion's share of work:

Maung Po Maung, Subdivisional Officer and Township Officer, Myitkyina.
Maung Myat Tha Gyaw, T.D.M., Township Officer, Mogaung.

* * * * *

Maung Maung, Itinerant Teacher, Maung Shwe Tun U, Assistant Teacher, Mogaung, and Maung On, Clerk in the Subdivisional Officer's office, Myitkyina, made themselves extremely useful.

Among the Enumerators Maung Baw, of Nanyaseik (Ruby Mines), and Maung Paw, of Zigôn, Kamaing, are specially mentioned by Charge Superintendents. My thanks are also due to Captain A. G. Crocker, Assistant Commandant, for the trouble he took over the Census of the Military Police.

* * * * *

With the exception of the Jade Mines circle none of the preliminary summaries were used in compiling the district summaries, as all the other final summaries were received in this office by the morning of the 5th March and the telegrams to the Census Commissioner, Calcutta, and Superintendent, Census Operations, Burma, were despatched after that noon.* * *

(*g*) *Operations in non-synchronous tracts.*—These tracts comprised the following:—

(*a*) The Kachin and Shan-Chinese villages which are for the purposes of revenue under *myothugyis* in the Myitkyina township.
(*b*) The Sinbo Hill tracts, in the Myitkyina township, from which tribute is paid through the Sinbo *Kayaingôk*.
(*c*) The Kachin Hill Tracts in the Mogaung township.
(*d*) The Kachin Hill Tracts in the Kamaing township.

In (*a*) the Shan-Burman *myothugyis* were Enumerators, but in the other non-synchronous tracts special paid Enumerators had to be appointed.

* * * * *

In addition to this each Kachin *Duwa* (or superior headman) was paid Re. 1 per village for going round with the Enumerators to assist them and see that they came to no harm. As Kachin headmen receive no remuneration from Government, it was thought advisable to pay them for the extra trouble thus involved. The sum thus expended was Rs. 288. In the Mogaung subdivision this enumeration began on the 1st February and, with the exception of very distant circles, the schedules were received by the Subdivisional Officer by the 25th February. None were submitted before the 20th. The schedules from the Kadon Tract on the northern border were not handed in to the Township Officer until the 27th, those from the Jade Mines Kachin Tracts until the 26th February, and those from Lama (on the north-western border) until the 4th March. It appears that the Kansi *Duwa* was to blame for delaying the last two.

In the Sinbo Hill Tracts of the Myitkyina subdivision * * * the enumeration was not commenced until the 5th February and was completed in the different circles on the 14th, 19th, 20th, and 23rd respectively.

* * * *

In the Kamaing township the Kachins were at first suspicious, but soon overcame this feeling, and the Extra Assistant Commissioner reports that the totals are fairly accurate and the result of the Census much more satisfactory than he thought possible. In the Mogaung township the *Duwas* gave every assistance and there was no trouble anywhere. * * *

The purely Kachin Hill Tracts on the east of the Irrawaddy were treated as "excluded" tracts and the population estimated only. The people here are much less civilized than in other parts of the Kachin Hills in this district, the villages are at greater distances from Shan villages and travelling is more difficult, and it was not possible to obtain Enumerators who could be relied on to fill in the ordinary schedules with any degree of accuracy. The work had therefore to be left to the Civil Officers, Sadôn and Sima, who were directed to prepare lists giving the number of males and females of each tribe (according to the list given on page viii, Appendix A, Volume IX, Census of 1891). This work was commenced towards the end of December and completed a few days before the end of February. * * *

(*h*) There were no prosecutions under the Census Act. Generally speaking the attitude of the people towards the operations was one of utter indifference, but they willingly gave assistance when called on.

(*i*) The total cost of Census operations in the Myitkyina district has been Rs. 1,151-6-0 * * *. In synchronous tracts, each step of the operations was punctually and carefully carried out. Full provision was made for the Census of travellers, &c.

(*k*) No vital statistics are recorded in this district. There have been no epidemics during the past ten years.

* * * * *

(*l*) *Immigration.*—There has been considerable immigration into this district since the last Census. This commenced with the construction of the Railway about five years ago. On this work a large number of men were of course employed. The majority were Uriyas and Chinese-Shans; of the former a few have settled as cultivators near Mogaung. * * *

Myitkyina town, 466 houses.—The original Shan-Burman population has not increased and only a few Burmans from the lower districts have settled here. The population consists of a medley of Surati, Bengali, and Punjabi petty traders and shopkeepers and a few Hindustani cultivators.

* * * * *

Kamaing, which might now almost be called a town, has increased from some 50 to nearly 250 houses in the past five years.

The increase of population at Mogaung has been slight only and is of the same description as that at Kamaing. * * *

There is no doubt that the population in this neighbourhood would have been much greater than it is, had it not been well known that the Railway Company is incapable of carrying away the paddy which is even now produced. * * * The high freights and the unsatisfactory running of the Railway is distinctly retarding progress in this district.

* * * * *

From B. HOUGHTON, Esq., I.C.S., Deputy Commissioner, Katha, to the Superintendent, Census Operations, Burma,—No. 865—5-D., dated the 16th March 1901.

In accordance with your Circular No. 24 of 1901, I have the honour to submit a report on the Census operations in this district.

(*a*) *General register of villages.*—Orders were given for the preparation of this immediately on receipt of Revenue Secretary's letter No. 112—3C.-1, dated the 6th April 1900 (received on the 27th April 1900), but it was not finally completed till the middle of October, the delay being due to the Kawlin and Pinlèbu Myoôks.

The circle lists and maps were taken in hand immediately after and were completed on the 19th November. The preparation of the maps caused some delay.

* * * * *

(*b*) Although the house-numbering was postponed till the 15th December in order to avoid confusion with the *thathameda* house-numbers, some little confusion did arise between the two, but this was soon obviated by the Inspecting Officers. * * * The house-numbering was completed on the 1st January. The house lists were received on the 13th November and distributed on the 15th November.

(*c*) There were in all 10 Charge Superintendents, who were mostly the Myoôks of the townships concerned. * * * There were 172 Supervisors. These consisted for the most part of revenue Surveyors, clerks, *myothugyis*, and selected thugyis. The Enumerators numbered about 1,884, and consisted of thugyis, *gaungs*, and villagers selected for their intelligence and education.

* * * * *

(*d*) The first batch of schedules was received on the 20th December and distributed the same day.

With some exceptions, the Enumerators and Supervisors did their best according to their lights, but it may be safely said that practically every mistake possible was made. The schedules for natives of India gave the most trouble, even educated Burmans being ignorant of the geography and ethnology of that country. I accordingly issued a short circular explaining matters as regards religion, race, and district (zilah). The Chinese were, with the approval of the Census Superintendent, entered as "Nat" by religion, though their real religion is ancestor worship. There is, however, no word for the latter in Burmese.

The question of below what age people should be considered as workers gave some trouble and caused a good many corrections. The mistake in the Burmese corrigendum on the subject of women and children, with domestic occupations only, caused also a similar result.

On the subject of occupation it may be mentioned that one thugyi, who was determined that every person should have *some* occupation entered against him, showed all infants as "suckling." This same thugyi entered a child not yet born in his lists, and showed it as a girl. On being questioned, he said that the child would be born before the 1st March. So it was, but it turned out to be twins.

* * * * *

(*e*) The final enumeration went off without a hitch on the night of 1st March, the various Charge Superintendents helping chiefly in their headquarter towns.

Special arrangements were made for checking carts on the Wuntho-Pinlèbu road and boats on the Irrawaddy.

* * * * *

The best work as regards the Census was done by the three Subdivisional Officers, but the Myoôks of Mawlu and Tigyaing (Maung Shwe Po and Maung Kyaw Dun) were also zealous and painstaking. The office work was expeditiously and well done by my Chief Clerk, Mr. Turner.

(*f*) The preparation of the district, charge and circle summaries was carried out in accordance with instructions.

* * * * *

The entire district total was ready for telegraphing early on the afternoon of the 4th instant.

* * * * *

(*g*) The Kachin Hills were on this occasion enumerated for the first time (non-synchronously). Three Shans who could talk Kachin and write Burmese were employed on the work for two months in all (January and February). They were supervised by the Civil Officer, Mr. Jennings, Subdivisional Police Officer, Katha, who was on tour in the hills at the time. The work was easily done in the allotted time.

* * * * *

(*h*) No prosecutions were found necessary under the Census Act.

In a few places the people thought that the Census was a step towards further taxation. The attitude of the people as a whole, however, towards the Census was one of indifference

* * * *

The total actual cost of the operations may be put down as Rs. 259-13-6.

(*j*) The result of the Census may, I think, be accepted as accurate. A few units may have escaped enumeration here and there, but their total would be microscopical.

(*k*) Vital statistics are not collected in this district.

(*l*) There has been a fair amount of immigration into this district during the past 10 years, but not so much as might have been expected if one considers the large areas of land available for cultivation. The reason for this is that the climate is unsuitable for most people from the more southernly districts. Population is increasing most rapidly along the Railway line and least so in the land-locked area in the west of the district and along the Irrawaddy. In the latter case the high rates and fares charged by the Irrawaddy Flotilla Company, Limited, which has a monopoly of the river, prevent an extension of trade except in the more valuable kinds of merchandise. In the case of the Kachins the movement is from the north to the south.

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rom C. C. T. CHAPMAN, Esq., Officiating Deputy Commissioner, Ruby Mines District, to the Superintendent, Census Operations, Burma,—No. 647G.—1-D., dated the 30th March 1901.

I have the honour to submit the report called for in your Circular No. 24 of 1901.

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Brief report on the Census operations in the Ruby Mines district.

There were, for the Census of 1901, three townships for synchronous enumeration and these were allotted to three Charge Superintendents.

(*a*) The preparation of the general register of villages was commenced in July last. I found, on taking over charge of the district towards the close of October, that it had practically been completed, but, owing to the nomadic habits of the Palaungs and Lisaws of Charge No. III, many alterations had to be made and consequently the preparation of the circle lists was delayed, and they were not finally distributed until the third week in November.

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(*b*) House-numbering was commenced and completed in the month of December. In the town of Mogôk the date of completion was the 28th of that month.

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(*c*) The following table shows the agency employed:—

Charge No.	Superintendents.	Supervisors.	Enumerators.
I	1	7	88
II	1	7	68
III	1	21	157

* * * * *

(*d*) Owing to the main supply of general schedules, covers, &c., going astray the preliminary enumeration in these three charges had to be done on manuscript forms and the fact that Enumerators and others did not hesitate to dip their hands into their pockets to purchase the necessary paper, which, like everything else in the Mogôk district, is an expensive commodity, speaks well for the keeness displayed by all hands.

In rural areas the preliminary enumeration was commenced about the end of January and completed in Charge No. III in about a week, in the other two charges by the middle of February. In the town of Mogôk it was thought better, owing to the large number of persons who come to and leave the town daily, to defer the preliminary enumeration to as late a date as possible. It was commenced on the 20th of February, the entries were tested, as made, by reliable officers, and all was ready on the 28th February for the final enumeration. In Charges I and II * * * the work was ably carried on by Myoôks Maung Po Kin and Maung Kyaw Zaw and the Subdivisional Police Officer of Tagaung, Mr. Nicholson, to whom my thanks are due for the assistance he gave in checking.

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(*e*) Amongst Charge Superintendents Mr. H. L. Stevenson, I.C.S., was indefatigable and it is owing entirely to his personal and unsparing efforts that the figures obtained in his extremely difficult charge are as nearly accurate, I feel certain, as they well could be. He was ably assisted by all his Supervisors, and has specially brought to notice the services of Maung Po Maung, *Myothugyi* of Mogôk, and Maung Htin, Thugyi of Kyatpyin.

In Charges I and II Myoôk Maung Po Kin rendered especially good service.

He worked hard and successfully until relieved a few days before the final enumeration by Myoôk Maung Po Hnit, T.D.M. This latter officer * * * did most valuable work.

(*f*) The circle and charge summaries of the areas non-synchronously censused reached me on the last day of February, those of Charges I and III on the 4th and 5th of March respectively.

As reported in my letter No. 105G.—1-D., of the 12th January, arrangements were made for the despatch from Charge II of the charge and circle summaries based on the preliminary enumeration, in time to enable me to include the figures in my provisional totals. The Charge Superintendent, however, by wiring from Tigyaing was able to give me the totals of the final enumeration by the 3rd of March and consequently the figures wired by me to the Superintendent, Census Operations, on the 6th were the final ones for the whole district.

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(*g*) The areas non-synchronously censused were the Momeik State and the Kachin Hill Tracts, commonly known as the Kodaung. The State was divided into two circles and in these the Census was superintended by the Subdivisional Officer, Maung Cho, and the Township Officer, Maung Myat Thin. In the early days of the preparations for the taking of the Census it was thought that it would be necessary to employ two paid assistants to assist these two officers, on a salary of Rs. 50 per mensem each, and sanction was obtained to do so. Subsequenty it was found, thanks to the cordial assistance rendered by the police, that their services were not required, and the Census, which I believe to have been a very thorough and accurate one, was taken without a hitch and without any extraneous assistance. It was commenced on the 16th January and completed by the 2nd of the succeeding month. Much credit is due to the Subdivisional and Township Officers.

In the Kodaung, peopled entirely by illiterate Kachins and Palaungs, the non-synchronous Census was conducted by the Civil Officer, Mr. Walter, Extra Assistant Commissioner. It was commenced on the 4th of January and completed by the 25th of February.

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(*h*) In the areas non-synchronously censused, with the exception of a slight difficulty experienced at the start with the Palaungs, the attitude of the people towards the operations was all that could be desired. They readily gave all the information required. In the areas synchronously censused the same may be said of the attitude of the people generally.

The Lisaws in Charge No. III were inclined at first, like the Palaungs of the Kodaung, to look on the proceedings with suspicion, smelling fresh taxation in the lists, and the Maingtha coolies, of whom large numbers are employed in the Ruby Mines at Mogôk and on the Ruby Mines road, were also actuated by the same unworthy motive. Apart from these the conduct of the people was exemplary.

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It was not found necessary to resort to proceedings under the Act.

(*i*) and (*j*) The total cost of the operations amounted to Rs. 291-11-0, and I have no hesitation in saying that a very accurate estimate of the population of this district, as it stood on the 1st of March, has been obtained.

(*k*) Vital statistics are not registered.

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(*l*) With the exception of that of Charge No. III, the population of the district may be said to be fairly stationary.

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From Captain O. J. OBBARD, Deputy Commissioner, Shwebo, to the Superintendent, Census Operations, Burma,—No. 1387-6C., dated the 14th May 1901.

With reference to your Circular No. 24 of 1901, I have the honour to report on the Census operations of this district as follows:—

(*a*) The preparation of the general list of villages in Form Appendix A was undertaken and completed about the end of May last. The number of houses as given in column 3 was not in the first instant correct, as the numbers were taken from the headman's *thathameda* lists; so when the actual numbering of houses was completed it was found that the number of houses in almost every village exceeded the numbers as shown in the village registers. * * * I would suggest that in future the instructions for numbering of houses should be issued at a very early stage and that the village headmen be made responsible for carrying out the numbering of all houses in their charges. * * * The Supervisors and Enumerators would, of course, when appointed, check and correct the original numbering of the houses. * * *

(*b*) The numbering of houses commenced about the 15th October and was completed by the 15th November. No difficulty was experienced in numbering the houses, and on the whole it was carefully undertaken.

(*c*) There were 10 Charge Superintendents, 212 Supervisors, and 2,084 Enumerators employed in the whole district.

The Township Officers were the Charge Superintendents in their townships. The two latter were drawn from clerks, surveyors, village headmen, and others who were able to read and write.

(*d*) The preliminary enumeration was commenced about the 20th January and was completed about the middle of February. As a rule most of the Enumerators took the precaution of making the original record on blank paper or *parabaiks*, and after they were inspected by the Supervisors and in many cases by the Charge Superintendents the entries were then recorded in the printed schedules.

* * * * *

(*e*) The final enumeration was strictly carried out on the night of the 1st March between 7 P.M. and midnight. The work was on the whole intelligently done, as the Enumerators and Supervisors had been carefully instructed in the work.

I would bring specially to notice the good work performed by Shaik Safdar Hussain. He was on the 7th March 1901 placed in charge of the Census operations in the Shwebo subdivision, where, owing to neglect of orders about distribution of schedules, &c., the arrangements had fallen into great confusion. It is largely due to his energy that satisfactory arrangements had been made before the date of the final enumeration.

Maung On Gaing, Subdivisional Officer, Kanbalu, also did very good work. * * * Maung Po Than, Kanbalu Myoôk, also took great pains with the Census arrangements in his township, which were very complete and well arranged.

(*f*) The circle summaries were prepared by Supervisors in the presence of the Charge Superintendents and from their lists the charge summaries were made up by the Charge Superintendents themselves. All Supervisors had orders to bring their schedules to a convenient centre of the township, where the Township Officer had arranged to meet them on the 3rd March. For distant and outlying circles preliminary summaries had been prepared, but it was not found necessary in any instance to make use of them, as all Supervisors arrived with their schedules in time to have the final figures incorporated in the charge summaries. By the 5th March all schedule books, together with circle and charge summaries, reached the district office, and on the 6th March the provisional totals were telegraphed to the Census Commissioner, Calcutta, as well as to the Superintendent, Census, Rangoon.

* * * * *

(*h*) No prosecutions were instituted. The people were more or less prepared for the operations and no difficulties of any kind were offered.

(*i*) The total cost of the operations in this district amounted to Rs. 354.

(*j*) Judging from the number of books examined personally by myself and the Subdivisional and Township Officer, there is every reason to suppose that fairly accurate results have been obtained.

(*k*) I do not think that emigration or immigration has been going on to any great extent in this district.

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From T. J. METCALFE, Esq., Officiating Deputy Commissioner, Sagaing, to the Superintendent, Census Operations, Burma,—No. 624-3M.M., dated the 20th March 1901.

I have the honour, with reference to your Circular No. 24 of 1901, to submit the following brief report on the Census operations of 1901 :—

(*a*) There was a little difficulty experienced in the preparation of the general register of villages or towns, as, owing to the houses not having been numbered, many were found to have been omitted, and in many cases the number of houses were found to have been taken from the last *thathameda* assessment-roll. It would simplify matters at the next Census if, in Upper Burma, the numbering of the houses was carried out simultaneously with the preparation of this list.

(*b*) *House-numbering.*—The house-numbering was commenced about the 4th September and practically finished by the middle of November. * * *

(*c*) *Supervisors, &c.*—There were nine charge Superintendents, 208 Supervisors, and 4,559 Enumerators. Supervisors were generally clerks and thugyis of circles, and in some cases efficient *ywasayes.*

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(*d*) *Preliminary enumeration.*—The date of the commencement of the preliminary enumeration was between the 15th and 20th January. The date of completion, however, was not until about 15th to 25th February.

* * * * *

(*e*) *The final enumeration.*—Every available officer was made use of on the night of the final enumeration. Every one gave their cordial assistance. No difficulty was experienced from the Burmans, and the thugyis as a rule gave all the assistance they could. The two officers whom I think deserve to be especially mentioned are Maung Lu Maung, the Padu Myoôk, and Maung Ket, Chaungu Myoôk.

* * * *

(*f*) The district, charge, and circle summaries were carried out as a rule according to instructions.

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The district summary was telegraphed on the 6th March.

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(*h*) No prosecutions under the Act were necessary.

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The attitude of the people was good and no difficulties were experienced.

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(*i*) The total actual cost of the operations is Rs. 110-14-0, being charges for special messengers' hire, telegrams, and other contingencies.

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(*j*) The results obtained are, I think, as correct as could be expected. Every care was taken to make them as correct as possible.

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From Captain C. L. O. REID, Deputy Commissioner, Lower Chindwin, to the Superintendent, Census Operations, Burma,—No. 516-1C., dated the 4th April 1901.

Census report of the Lower Chindwin district.

(*a*) *General register of villages and circle lists.*—The general register of villages for the district was prepared in the district office. * * *

* * * * *

As the circle and block arrangements proposed in the register might be found unsuitable when put into practice, and to obviate the necessity of correcting and re-correcting the entries in the circle list, if prepared in the District office from the village register, extracts, were sent to Township Officers for careful scrutiny and check and revision, if necessary, and as there were revising the register they were ordered to prepare circle lists in their own offices to save the delay in distributing the circle lists to the Supervisors who, without such meterial, would find it difficult to start numbering houses.

By this means I was able to maintain a register of villages corrected up to date and to furnish the Supervisors with circle lists in time for them to commence house-numbering.

(*b*) *House-numbering* —This work was started in the Mônywa township (Charge No. I) on the 17th October and completed on the 15th December 1900. The revision of circle and block arrangements continued till the end of December 1900.

In the Budalin township (Charge No. II) house-numbering commenced on the 26th October and was completed on the 15th December 1900, and the work of revising circle and blocks continued till some time after the completion of house-numbering. In the Palè and Kani township house-numbering was started on the 25th October and completed on the 17th November 1900 and in the Salingyi township on the 29th October and completed on the 19th December 1900.

* * * * *

(*c*) *The agency employed.*—Excluding the Charge Superintendents and Enumerators appointed for the Railway Census, there were five Charge Superintendents, 313 Supervisors, and 2,242 Enumerators appointed for the Census in the rural areas of the district.

Each township was treated as a separate charge and the appointment of Charge Superintendent was held by the Township Officer in charge. Each revenue circle was, in all but a few cases, treated as a Census circle and the headman or *myothugyi*, in all but a few cases, was appointed Supervisor of the circle. Literate headmen of subordinate villages were appointed Enumerators of the villages under their control.

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(*d*) *The preliminary enumeration.*—The preliminary enumeration in the rural areas of the district was started on the 15th January and completed on the 31st January 1901. While this work was in progress Subdivisional, Township and Police Officers were ordered to move about in their respective charges to check the work done by Supervisors and Enumerators.

(*e*) *The final enumeration.*—The work at this stage was done with care and I expects that, apart from the correctness of the entries relating to occupation, &c., the totals will be fairly correct. * * * The work was done willingly by all who were employed as Charge Superintendents, Supervisors, or Enumerators.

* * * * *

Maung Dwe, A.T M., Myoôk of Mônywa and Superintendent of No. I Charge, took a keen interest in Census work and was untiring in his efforts to bring the work to perfection.

* * * * *

(*f*) Immediately after the final Census was over and after the schedules had been checked by the Supervisors, arrangements were made with the Charge Superintendents to have all schedules brought into district headquarters by the Supervisors of circles.

On their arrival the Municipal office was vacated and there the necessary checking and preparation of circle, charge, and district summaries were carried out.

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(*g*) There are no non-synchronous areas in the district.

(*h*) There were no prosecutions under the Census Act, as the attitude of the inhabitants did not warrant such steps being taken.

(*i*) The total actual cost of the operations in this district amounted to Rs. 88-8-0.

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(*j*) The results obtained may be said to be fairly correct.

(*k*) *Vital statistics.*—Only registration of deaths was introduced into his district from 1st January 1899, so that there is nothing important to report under this head.

Census report for the Municipality of Mônywa. By the Municipal President.

(*a*) *General register of the town and circle lists.*—The general register of the town was prepared by treating the blocks under each *akwetôk* as a Supervisor's charge where this was convenient, except the civil lines and Old Cantonment.

* * * * *

As the town of Mônywa is the headquarters of the district there was no difficulty in securing qualified men for appointment as Charge Superintendents, Supervisors, and Enumerators. Government servants as a rule were selected for these appointments. Circle maps were prepared from the Municipal map and supplied to the Supervisors with circle lists. * * *

(*b*) *House-numbering.*—This work was started from the 15th October and finished on the 15th November 1900. * * *

(*c*) *The agency employed.*—Excluding the Charge Superintendents, Supervisors and Enumerators for the Railway and survey camps, there were three Charge Superintendents, 13 Supervisors and 52 Enumerators appointed for the Census. The area of the Municipality, each myothugyiship, that is Mônywa and Hlègu, and the civil station, including the military and civil police and the Old Cantonment, was treated as a separate charge, and the appointment of Charge Superintendent for the civil station and the Old Cantonment was held by the Civil Surgeon, the Treasury Officer for Hlègu, and the *Akunwun* for Mônywa. * * * All the *myothugyis* and *akwetôks* excepting those *akwetôks* who were incompetent for Supervisors, were appointed as Supervisors. * * * Most of the traders and clerks were selected to be Enumerators for the blocks in which they had their residence.

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(*d*) *The preliminary enumeration.*—The preliminary enumeration of the town was commenced on the night of the 15th January 1901.

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(*e*) *The final enumeration.*—The work at this stage was done with care under the control of the Charge Superintendent and Supervisors, who were moving in their respective charges till the enumeration was entirely finished on that night, and I may say that the work was done satisfactorily. The work was done willingly by all those who were employed on this work. With the exception of Mr. B. Krishnà, my Chief Clerk and Supervisor of Kadoyat block, and Maung Nè Win, Enumerator under Mr. Krishna, no one deserves special mention for the Census work. * * * Enumerator Maung Nè Win deserves credit for the correctness and neatness of the entries in his schedules.

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(*h*) There were no prosecution under the Census Act.

(*i*) The total actual cost of operations incurred in this Municipality amounted to Rs. 10-10-0 only for supplying stationery to the Census employés.

* * * * *

(*k*) *Vital statistics.*—The registration of births and deaths was introduced only in 1897. * * *

Census report for the Upper Chindwin District,—No. 764-7N.—2, dated the 18th April 1901. By W. J. Smith, Esq., I.C.S., Deputy Commissioner

(*a*) *Preparation of Appendix A and of the circle lists.*—Appendix A was completed early in Jannary. The Superintendent, Census Operations, on going through the list at the beginning of September 1900 found many of the blocks too large and in some cases unsuitable persons proposed as Enumerators. The appendix was therefore revised. Circle lists and maps were sent out on the 31st October 1900, together with the instructions, to Supervisors.

(*b*) *House-numbering.*—Circular No. 10 of 1900 was received on the 13th October 1900 and Charge Superintendents were instructed to have the work of house-numbering completed as early as possible in November. It commenced on the 1st November 1900 and was completed on the 12th January 1901.

* * * * *

(*c*) *The agency employed.*—Twelve Charge Superintendents, 181 Supervisors and 1,407 Enumerators were employed. The Charge Superintendents were in every case Township Officers, except in the case of the Taungdut and Kanti States, where the Charge Superintendents were the *Sawbwas* of those States, and the old Seywa circle, where the Charge Superintendent was Maung Kyaw Gaung, Head Constable. The Supervisors were mostly subordinate officials, clerks, and *myothugyis*. Among the Enumerators were clerks and policemen, but the large majority were *ywathugyis*.

(*d*) *The preliminary enumeration.*—This commenced on the 10th January 1901 and was completed on the 15th February 1901. * * * Owing to the great distances and deficient communications of the district it was considered advisable to have the preliminary figures for use in the event of the summaries of the final Census not reaching headquarters in time. The preliminary figures were actually used for the whole of the Legayaing subdivision and for the Kale township.

(*e*) *The final enumeration.*—All officers worked well and hard, and I believe that very few persons have escaped enumeration.

* * * * *

The best work was done in the Kindat subdivision, and I have to thank Mr. Kenny, Subdivisional Officer, and Maung Po Hla, Township Officer, Kabawchaung, for the excellent work they did. Maung Ba Gyaw, Treasury Officer, who had the most difficult circle in the

district to supervise, namely, Kindat town, also did conspicuously good work. Maung Myo, *Akunwun*, Maung Lat, District Surveyor, and Maung Tun Byu, Chief Head Constable, also did good work as Supervisors, and Maung Aung Thin, Head Clerk, Subdivisional Officer's office. Maung Ba, Treasury Accountant, and Maung Kyaing, Head Judical Clerk, as Enumerators.

I have also to thank Maung Pe, Subdivisional Officer, Mingin, for his unflagging energy and zeal throughout the operations.

* * * * *

In order to get the provisional totals in quickly, Subdivisional Officers were instructed to send in their charge and circle summaries by the 5th March at latest and for the purpose the two launches at my disposal were despatched one to Mingin and the other to Homalin. * * * On receipt of the charge and circle summaries the whole staff of the district office was put on to prepare the district summary, which was telegraphed to the Census Commssioner, Calcutta, and the Superintendent, Census Operations, Rangoon, on the 6th Marchi.

(*g*) *The operations in non-synchronous areas.*—It was originally proposed to hold a non-synchronous Census in the Chin villages in the Thaungdut State, the Chin and Theinbaw (Kachin) villages in the Kanti State, and the Theinbaw villages between the Kanti State and the Uyu. The Thaungdut *Sawbwa* was, however, able to take a synchronous Census of the whole of his State. The only non-synchronous tracts were therefore in or on the border of the Kanti State. Now for some little time past the Kanti *Sawbwa* has been trying to exercise a more direct influence over both the Chins and Theinbaws, and imposed on the latter this year for the first time a tax of Rs. 2-8-0 per house. They strongly protested against this both to me and to the Deputy Commissioner, Myitkyina, who stated that the Kachins on the border were somewhat disaffected and the *Sawbwa* was ordered to desist. When the Enumerators came round the Theinbaws at once suspected fresh designs on the part of the *Sawbwa* and refused to be enumerated The *Sawbwa* wisely abandoned the enumeration. These tracts have been estimated as follows by the Subdivisional Officer :—

	Houses.	Males.	Females.	Total.
Ngapaw	3	6	6	12
Lakyein	4	8	8	16
Nanpaw	5	10	10	20
Ukah	15	30	30	60
Pemkaw	20	40	40	80
Total ...	47	94	94	188

These figures were included in the provisional totals.

(*h*) With the above exception the attitude of the people towards the operations has been good * * *

(*i*) The total cost of the operations in non-synchronous tracts was estimated at Rs. 125, as the non-synchronous enumeration did not take place, in all probability none of this has been expended.

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From Major J. J. CRONIN, Deputy Commissioner, Kyauksè, to the Superintendent, Census Operations, Burma,—No. 1709-5C.—2, dated the 23rd April 1901.

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With reference to Census Circular No. 24 of 1901, I have the honour to report on the following points *seriatim*.

(*a*) *Preparatory work.*—The preparation of the general village register A for the Kyauksè and Myittha subdivisions started early in May 1900 in township offices and was finally completed at headquarters, together with the map of the area to which the abstracts relate, on the 20th July, and copies were sent to you with this office letter No. 238-5C.—2, dated the 25th July 1900. Subsequently this was found to be incorrect, and revised abstracts of the general village register and map for the whole district excluding the town of Kyauksè and railway were made out and copies sent to you with this office letter No. 2892-5C.—2, dated the 20th October 1900. * * *

(*b*) *House numbering.*—The numbering of houses was commenced and completed on the following dates.—

Name of township.	Numbering commenced.	Completed.
Kyauksè	10th October 1900 ...	3rd November 1900.
Singaing	12th October 1900 ...	4th November 1900.
Myittha	15th October 1900 ...	14th November 1900.
Dayegaung	16th October 1900 ...	15th November 1900.

(*c*) *The agency employed.*—There were in all nine Charge Superintendents, namely, one Townshp Officer, one *myothugyi,* one *akunwun,* one Assistant Engineer, Railway Department, and five Land Records Inspectors ; 73 Supervisors ; and 1,044 Enumerators. None of these were paid. The Supervisors consisted of revenue surveyors and thugyis, and the Enumerators consisted of villagers, and in Kyauksè town Government clerks. * * *

(*d*) *Preliminary enumeration.*—The preliminary enumeration was commenced on the 15th of January and completed on the 15th February 1901.

(*e*) *Final enumeration.*— * * * On the night fixed for the taking of the final Census, the Enumerators visited each house and in many cases were were accompanied by the Supervisors. The head of each house was called, then the entries read over to him, and names erased or added where necessary. * * * Among the Charge Superintendents, the Singaing Myoôk, Maung Tha Bu, Charge Superintendent of his Township, and the *Akunwun,* Maung Tun Ya, Charge Superintendent of the Kyauksè Municipality, took great pains in Census work and deserve special commendation. * * * I wish specially to commend U PO, T.D.M , Subdivisional Officer, Kyauksè, and Mr. Wakefield, my Chief Clerk, on whom the brunt of the preparation for the Census in the district fell. My thanks are also due to Mr. Tilly, District Superintendent of Police, and Mr. Robinson, Assistant Superintendent of Police, Myittha, for their willing assistance in checking the Census work in the Myittha subdivision.

* * * * *

(*h*) Most of the people having been previously informed of the object and purpose of the Census, their minds were not in any way disturbed and no difficulty was experienced in taking the enumeration. People of every class willingly gave all the information required by the Census officers, and consequently no prosecution under the provisions of the Census Act was necessary. * * *

At the previous Census, many headmen have informed me, that the children and youths in numerous instances were hidden in the jungle to avoid enumeration till after the Census or, as the people in some cases believed, to avoid being enlisted as soldiers.

* * * * *

(*i*) No expenditure was incurred in the district in connection with the taking of the Census.

(*j*) From the careful way in which the work of the Census was carried out all over the district I have every reason to believe that the result obtained is as correct as it could possibly be.

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(*l*) *Emigration and immigration.* —There is no record in this office as to emigration and immigration within the last ten years.

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From E. C. S. GEORGE, Esq., C.I.E., Deputy Commissioner, Meiktila, to the Superintendent, Census Operations, Burma,—No. 1712-1C.—6, dated the 31st March 1901.

In reply to your Circular No. 24 of 1901, I beg to report as follows :—

(*a*) Everything was very late in this district and matters had to be rushed through at great speed.

A kind of general register had been started, but early in December on arrival I found that—

(*a*) the villages of the district had been numbered serially throughout the district ;

(*b*) villages or rather hamlets which were not villages in the meaning of the Upper Burma Village Regulation had received independent numbers ;

(*c*) the grouping of villages into circles was imperfect, some circles consisting of 2 or 3 areas not contiguous, with other circles interposed. In Meiktila town division into wards had not always followed natural features so as to be clear.

The whole therefore of Appendix A had to be revised.

* * * * *

[illegible] *numbering.*— There was little difficulty about this, as in previous years I had [illegible] the houses being numbered for the purposes of *thathameda*-checking and the people were well used to the system, the advantages being obvious in large villages even to the [illegible]

* * * * *

[illegible] that the best solution for painting numbers is lamp black off the [illegible] pots mixed with earth-oil. Lime is useless : it easily gets obliterated and [illegible] accordingly.

* * * *

(*c*) *Agency employed.* * * * So far as the district proper was concerned, it was divided into 11 charges under 11 Charge Superintendents. * * * Omitting Meiktila town and Cantonments, the district was divided into charges following the lines of the townships.

* * * * *

There were 137 circles and therefore 137 Supervisors, excluding Railway and Survey parties, and 1,785 blocks and consequently Enumerators. Of the 137 Surpervisors, 75 were thugyis, 33 were land Records surveyors, 11 Government clerks, and the rest were local men. Of the 1,785 Enumerators, 201 were thugyis, 408 were village elders, 79 were traders, 19 were Government clerks. The rest were ordinary cultivators locally resident who had sufficient knowledge to read and write.

* * * * *

(*d*) The *preliminary enumeration*, as explained in paragraph (*a*) above, was much delayed, nor did we actually receive a whole supply of forms till the 13th January 1901.

* * * * *

In charge No. II * * * the Charge Superintendent was ill most of February and finally had to go on casual leave. * * * The result was that Mr. H. C. Moore had to be deputed to hurry to Thazi. All the Supervisors and as many Enumerators as possible were called in to Thazi and their books written up under Mr. Moore's personal supervision.

Preliminary totals were received from—

Charge I on 24th February 1901.
Charge II on 22nd February 1901.
Charge III on 18th February 1901.
Charge IV on 20th February 1901.
Charge V on 20th February 1901.
Charge VI on 19th February 1901.
Charge VII on 19th February 1901.
Charge VIII on 16th February 1901.
Charge IX on 16th February 1901.
Charge X on 16th February 1901.
Charge XI on 16th February 1901.

Every availabe officer was put on to testing duties and a weekly return was prescribed of villages tested by them.

* * * * *

As regards difficulties to be dispensed with in future Censuses there were several.

To begin with and foremost the Superintendent of Census himself should be held personally responsible for the proper translation of every single vernacular order, code, or circular issued. * * * The Census agency in its subordinate branches is none too intelligent, and every effort should be made in issuing manuals and instructions to see that—

(i) they are presented in the form of a mental pap which requires the least amount of trouble in assimilation;

(ii) the language in which they are conveyed should be of the simplest nature;

(iii) no terms which are similar in sound or form and thereby liable to confusion should be used to designate different details.

As regards the points above I pointed out several inaccuracies by letter in December 1900 to the Superintendent of Census in the translations of the manual, and it is needles to repeat them here as by next Census it is trusted revised translations will be available.

But I may observe that it is not sufficient to have an actual literal rendering of the English version as the Government Translator seemed to erroneously imagine. What was wanted was a translation conveying in homely language the spirit of the instructions.

It surely should have been obvious moreover that just as the words charge, circle, block, Superintendent, Supervisor, Enumerator are clear and distinct and not to be confused in English the same care should have been taken to have these terms distinguished in Burmese. But they were not. It is not obvious, why, if "နယ်" was chosen to indicate a "charge," the circle should not have been designated by a term that did not have "နယ်" in it. Again block was called အတွက်။ Obviously and Enumerator being the man who had to write up the schedule book in the block should have been called something that would connote his connection with the block, while differing entirely from the terms used for Supervisor and Superintendent. အတွက်စာရေး။ seemed the right term to convey the spirit of the man's duties to the dullard, yet the translation goes out of its way to call the Enumerator စာရင်းကောက်သူ။, on instance of what I have before remarked on.

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The next point is in regard to the forms.

It cannot too often be urged that for Burmese Enumerators everything must be made plain sailing; therefore in the inside of the schedule book cover the most important directions, where a fool would naturally go wrong, should have been printed in red.

For instance in Rule (1) it might have been stated in red that the word "empty" was to be written in this column below the number of the house. The use of the term "after" led many Enumerators to write ဝိုဏ် in column 3 for empty houses, which was evidently what was not intended, as this might lead to mistakes at the final enumeration. Again the prohibition to enter anything at all in column 2 till after final enumeration might well have been in red ink. The utmost difficulty was experienced in preventing too zealous Enumerators from trying to fill up column 2 before its due time; it was a natural error. Again in this district, except where Mr. Porter issued contrary instructions, the Enumerators were made to use a page per house. They were quite too stupid for the most part to make it at all certain that the system of only leaving one line blank between each house would work.

As regards the block lists it was intended (*see* Chapter I, section 15 of the Manual) they should contain only 25 bouses each; it would have been advantageous to have had them printed only on one face and 25 faint lines ruled thereon.

(*e*) There was no special difficulty about arranging for the final enumeration. The town returns were in first, of course. Of the district returns Charge III was in most promptly, followed closely by Mahlaing.

All returns were in by the evening of the 3rd March, except Charges No. I and II and the Railway returns.

* * * * *

All Officers worked zealously, but I would place on special record the services of Mr. Greenstreet, District Superintendent of Police, and Maung Po Thein, Subdivisional Officer, Meiktila, who were of very great assistance in hurrying up laggard Supervisors.

Of Mr. Moore's services I have made special note above. Mr Macfarlane, Assistant Superintendent of Police, Thazi, worked Charge III, the most difficult charge in the district from the nature of the country and the scattered disposition of its villages, single-handed, taking it over just about the middle of February. He deserves great credit for the promptitude with which his returns were sent in.

Of the Myoôks, Maung Ôn Thi, of Mahlaing, and Maung Po Thin, of Meiktila, deserve special notice; and of the other Charge Superintendents, Maung Ye Din, Inspector of Land Records, was most conspicuous. In Meiktila town Maung Po Te, Additional Township Myoôk, and Maung Ne Dun, the *Akunwun*, ran the Census between them and did it excellently. Mr. Ross, Assistant Commissioner, was also of much assistance. Both Mr. Porter, Subdivisional Officer, Thazi, and Mr. Richardson worked very hard, but the latter was incapacitated from sickness from going round his charge. * * * Captain Barnett, the Officer Commanding, Meiktila, assisted by the Station Staff Officer, Captain Smith, made most satisfactory arrangements for the Census of Cantonments, which was taken without any hitch.

My Chief Clerk, Maung Pyu, was invaluable throughout the Census operations.

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(*f*) The preparation of the district summary was supervised by Mr. Ross, Assistant Commissioner, who was in special charge as directed by paragraph 6 of Chapter XII of the Census Code, the provisions of which were carried out.

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(*g*) There were no non-synchronous areas in the district.

(*h*) There were no prosecutions under the Act.

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The people of course connected the Census with the newly imposed rates under the settlement now being introduced and look forward to increased taxation.

* * * * *

(*j*) I think that the total may be relied on as fairly correct, except for the Railway figures. Details of caste, &c., will probably be wrong. It would have been more to the point if a table in Burmese had been drawn up of the most common of the various native castes, tribes, and sects, so that the Enumerator might run through the list with each native of India that he had to Census and see that he got the right details.

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(*k*) The collection of death ruturns only started in 1899, and so far are too imperfect to convey any useful information.

* * * * *

(*l*) *Emigration and immigration* — There is constant annual and increasnig migration from this district to Lower Burma, brought about by the facilities for rapid transport afforded by the railway, which now intersects the district both from north to south and west to east.

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Though there are traces still in the district of abandonment of areas on account of movements during the famine, it may be taken that the large majority have by now returned, the favourable season of 1900-1901 giving an impetus to the stream of immigration.

There has been practically no immigration from the Shan States and the emigration thereto from this district is too small to be worth considering. Natives of India are the only people who seem to evince a desire to move upwards to the plateau, chiefly because they are pretty traders and there in almost a virgin field in which to start cheating the Shans.

From A. L. HOUGH, Esq., Deputy Commissioner, Yamèthin, to the Superintendent, Census Operations, Burma,—No. 1550-3—1 of 1900, dated the 22nd April 1901.

With reference to Census Department Circular No. 24 of 1901, I have the honour to forward below a brief report on the Census operations in the Yamèthin district.

(*a*) The preparation of the general register of villages was commenced on the 24th May and completed on the 28th July 1900. * * * The circle lists with map were completed on the 15th October 1900 and were distributed on the same day to the Supervisors through their respective Charge Superintendents.

(*b*) The house-numbering in the rural areas was commenced on the 1st October and completed on the 15th November. The numbering was carried out strictly in accordance with the instructions given.

(*c*) The agency employed was as follows:—

Charge Superintendents	17
Supervisors	91
Enumerators	1,751

The agency employed was generally very efficient, consisting of numerous ministeral officials in all departments who,on the whole, worked exceedingly well. There were a large number of headmen, their clerks and villagers who were also employed as Enumerators.

(*d*) The preliminary enumeration was commenced on the 15th January 1901 and completed on the 23rd February 1901. There was no difficulty in taking the enumeration as the people on the whole gave willingly what information was required of them.

(*e*) The final enumeration was carried out without a hitch. I have pleasure in recording that Mr. R. A. Gibson, Settlement Officer, rendered me valuable assistance in preparing the Census map and giving instructions to his Inspectors and Surveyors, who were appointed Charge Superintendents and Supervisors, and in supervising their work.

The men of the Settlement and Land Records staff who may be mentioned as having done good work are—

Charge Superintendents.

Maung Pu, Inspector.	Maung San U, Inspector.
Maung Tun Myaing, Inspector.	Maung San Ya, Inspector.

The Subdivisional Officers, Messrs. C. S. Pennell, H. H. Duff, and latterly E. J. Colston, of Pyinmana, and W. G. Bowden, of Yamèthin, worked hard in the way of supervision. So also did the following gentlemen, namely:—

Mr. H. P. Pedler, District Superintendent of Police.
Mr. C. A. Munro, Assistant Superintendent of Police.
Mr. R. C. Whiting, Assistant Superintendent of Police.

Of the Supervisors and Enumerators the following did exceedingly good work, namely:—

Maung Gyi, Head Constable, Lewe.
Maung Shwe Min, Head Constable, Kyidaunggan.
Maung Tha Dun, Police Sergeant, Ela.
Maung Po Thet, *Myothugyi*, Ela.
Maung Lu Gale, *Myothugyi*, Yezin.

Of the Township Officers, who were all Charge Superintendents, the following I mention as having done their work zealously and well, namely:—

Maung Po Mya, Pyinmana.	Maung Min Naing, Pyawbwè.
Maung Po Tun, Pyinmana.	Maung Pu Le, Yamèthin.

Maung Po Gyi (Officiating Myoôk), Yamèthin, who carried out the latter portion of the Census work in the Yamèthin township charge for about one month.

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In connection with the office work, Mr. E. J. Ezekiel, Chief Clerk of my office, worked most commendably. He worked really hard and faithfully.

(*f*) The district, charge, and circle summaries were commenced on the 2nd and completed on the 6th March 1901, when the district total was telegraphed to the Commissioner of Census, Calcutta, and the Superintendent, Census Operations, Burma.

(*g*) There were no non-synchronous areas in this district. * * *

(*h*) No prosecutions were instituted under the Census Act, or necessary. * * *

(*i*) The total actual cost of the operations, exclusive of the cost of forms and stationery supplied from the Census office, is * * * Rs. 211-14-0. * * *

(*j*) The results obtained may, I think, be accepted to be as correct as it is possible to make a Census. Every effort was made to make it complete, and I think we can claim to have succeeded.

(*k*) The registration of deaths was introduced into this distrcit from the 1st January 1899. No epidemic of any kind affected the population during the last ten years. The increase in the population is attributable chiefly to natural causes and partly to the growing importance of the district, and the facilities afforded by the railway.

In 1896-97 a part of this district was subject to scarcity, which was officially declared to the famine, and a great many people went to other districts; but I think the increase show in the population indicates that nearly all have returned.

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From A. L. HOUGH, Esq., President, Yamèthin Municipal Committee, to the Superintendent, Census Operatons, Burma,--No. 18, dated the 22nd April 1901.

With reference to your Circular No. 24 of 1901, I have the honour to submit the Census report of the Yamèthin Municipality.

(1) In preparing the general register of the town of Yamèthin the names of villages and the number of blocks were compared with the register maintained in the Municipal office showing the names of headmen of wards and blocks, and on the 2nd of October an abstract of the Yamèthin town register was forwarded to you. * * *

(2) The numbering of houses was commenced on the 10th October and in some blocks on the 12th, and the earliest date of completion was the 14th October and the latest the 23rd October.

(3) Excluding the railway, there were 41 blocks within Municipal limits, for which three Supervisors and three Charge Superintendents were appointed. * * *

There were 41 Enumerators and one Assistant Enumerator. * * * Of the 41 Enumerators appointed, 22 were clerks and licensed copyists, one was as Municipal Office peon, 11 were *ayatôks* and *akwetôks*, and seven were traders and others.

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(4) *Preliminary enumeration.*—The earliest date on which the preliminary enumeration took place was the 1st February and the latest on the 9th, and the testing by the Supervisors was completed on the 20th February. * * *

(5) The work performed by the Supervisors and Charge Superintendents was on the whole satisfactory.

The following persons deserve special commendation for Census work in the town of Yamethin :—

Mr. E. J. Ezekiel, Chief Clerk, Charge Superintendent of No. 3 circle.
Maung Tun Ôn, *Akunwun*, Charge Superintendent No. 1 circle.
Maung Tun Win, Treasury Officer, Charge Superintendent of No. 2 circle.
Mr. F. J. Ellis, Secretary, Supervisor of No. 2 circle.
Maung Po Tun, Revenue Record-keeper, Supervisor of No. 3 circle.
Maung Pe Khin, Clerk, Supervisor of No. 1 circle.

Enumerators:
Maung Ba Thet, Clerk.
Anantaran, Hospital Assistant.
Maung Po Thein, Clerk.
Maung Hok, Clerk.
Maung Po Nyun, Clerk.
Maung Po Ka, Bailiff.
Maung Gyi, Clerk.
Maung Po Kun, Clerk.
Maung Shwe Bin, *Ayatôk*.
Maung Bah, Municipal Overseer.

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The district, charge, and circle summaries were submitted by the Supervisors on the 2nd and 3rd March respectively.

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From E. J. COLSTON, Esq., I.C.S., Vice-President, Pyinmana Municipality, to the Superintendent Census Operations, Burma (through the Deputy Commissioner, Yamèthin),—No. 68-31, dated the 4th April 1901.

In accordance with Circular No. 24 of 1901, I have the honour to submit a brief report on the operations generally.

(*b*) *House-numbering.*—The house-numberiag was commenced on the 1st November 1900 and completed by the 7th November 1900.

(*c*) *The agency employed.*—There were two Charge Superintendents, eight Supervisors, and 101 Enumerators employed for taking the Census, and the majority were selected from the educated and respectable class of men in the town.

(*d*) The preliminary enumeration commenced on the 20th January 1901 and was completed on the 22nd February 1901. The Charge Superintendents and Supervisors personally tested the work daily, and the general schedules were personally examined by the Deputy Commissioner. Some difficulty was at first experienced in the native quarter in obtaining the castes and tribes, but as the Charge Superintendents understood the language thoroughily, they overcame this difficulty by attending to those blocks personally.

(*e*) *Final enumeration.*—The quality of work performed by the Census officers was good and I specially recommend Maung Po Myaing, Maung Po Tu, Maung Ma Pe (2) and Bailiff Maung Gyi, Supervisors, for giving valuable assistance.

(*h*) *Prosecutions under the Act.*—Nil. The people at first did not wish to give their names, thinking they were to be taxed but when the reason for this operation was explained to them they politely and most willingly gave every information.

(*i*) The total actual cost for numbering houses, including stationery and excluding printing forms, was Rs. 42-10-0.

(*k*) *Vital statistics.*—There were no outbreaks of any epidemic during the past 10 years.

(*l*) *Emigration and immigration.*—During the year 1,897 immigrants from the famine stricken districts in Upper Burma settled here for a short time, but they returned to their homes in the following year.

From L. M. PARLETT, Esq., I.C.S., Officiating Deputy Commissioner, Myingyan, to the Superintendent Census Operations, Burma,—No. 1218—5-6, dated the 15th March 1901.

I have the honour to submit herewith a brief report on the Census operations in this district as called for in your Circular No. 24 of 1901, dated the 18th January 1901.

(*a*) *The preparation of the general register of villages or towns and of the circle list* —The general register of villages was prepared in the General Department of the Deputy Commissioner's office, also the circle list and map.

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The registers and circle lists were subjected to the closest examination by the Deputy Commissioner, the *Akunwun* and Township Officers.

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(*b*) *House-numbering* commenced on the 1st October and was finally completed on the 15th November. The people rendered every assistance and the work was accomplished without difficulty. The difficulty, however, was to keep the numbers on the houses. People earth-oiling their houses would daub out the number and children selected number boards as playthings in preference to all else. It was curious to find that the thugyis were very anxious that their own houses should bear the No. 1—the first and chief house in the village. The people generally considered that it was a harmless freak on the part of an energetic Government to count houses in this way, when the *thathameda*-rolls furnished really all the information which could possibly serve any useful purpose.

(*c*) *The agency employed.*—There were six townships dealt with.

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The charges were as follows :—

Myingyan	Township Officer.
Natogyi	Township Officer.
Taungtha (half)	Township Officer.
Taungtha (half)	Inspector of Police.
Pagan	Township Officer.
Kyaukpadaung (half)	Township Officer.
Kyaukpadaung (half)	Sergeant of Police.
Salè	Township Officer.

The Supervisors were generally *myothugyis* and the best educated thugyis.

The Enumerators were merchants, *ywagaungs*, thugyis, clerks, leading villagers, and in fact the best men in the villages.

* * * * *

(*d*) *The preliminary enumeration.*—Owing to the schedules not being received till the second week of January, the preliminary enumeration commenced at the end of January and was finished by the 10th February.

The work was first done on blank paper, which was checked thoroughly by the Myoôks (Charge Superintendents) and Subdivisional Officers of Myingyan and Pagan.

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The final enumeration.—The quality of the work done by all Census officers was good in some cases particularly so. The following deserve special commendation :—

Maung Me, Subdivisional Officer, Myingyan.

Charge Superintendents.

Maung Tin, Township Officer, Natogyi.
Maung No, Township Officer, Taungtha.
Maung Tin, Township Officer, Pagan.
Maung Kyin Han, Inspector of Police.
Maung Aung Myat, Sergeant of Police.

Supervisors.

Maung Twa, Thugyi of Sunlun.
Maung Me Gyaw, Thugyi of Thinbyun.
Maung Maung, Thugyi of Lethit.
Maung Po Hlaing, Thugyi of Tanaungdaing.
Maung Po An, Thugyi of Gyôkpin.
Maung San Myin, Thugyi of Taungtha.
Maung Maung Gyi, son of Thugyi Sameikkôn.
Maung So Min, Thugyi of Tazo.
Maung San U, Thugyi of Ywagyi.
Maung Pyan, Thugyi of Table.
Maung Hme, Thugyi of Busônywa.
Maung Po Saw, Thugyi of Kyanso.
Maung Po Bwin, Thugyi of Tawa.
Maung Po Than, Thugyi of Kyatywa.
Maung Waik, Thugyi of Tingan.
Maung Ba O, Thugyi of Ngathayauk-Tingyikan.
Maung Po Gaung, Thugyi of Taungbileya.
Maung Pe Gyi, *Myothugyi* of Taungsin.
Maung Myin, Thugyi of Taungnyo.
Maung Chet, Thugyi of Chaungshe.
Maung Po Ta, *Myothugyi* of Taywindaing.
Maung Shwe Ka, Thugyi of Taungbitawleywa.

Maung Ba, Head Clerk to the Myoôk of Taungtha, also rendered valuable assistance though not actually appointed a Census officer.

(*f*) *The preparation of the district, charge, and circle summaries, and the arrangements made for the early submission of data for the provisional totals.*—In order to expedite the despatch of provisional totals, it was arranged that all Supervisors should meet their Charge Superintendent in a suitable centre on the 2nd March, and prepare and deliver to him their circle summaries and thus enable him to compile and submit his charge summary.

On the 2nd March the Deputy Commissioner himself checked all the circle summaries from the town of Myingyan and as many circles as had come in from the townships.

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All figures were in on the 5th March, on which date the provisional totals were telegraphed to the Census Commissioner and Superintendent of Census, Burma.

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(*i*) The total actual cost of the Census operations is Rs. 106-4-0.

(*j*) *The correctness or otherwise of the results obtained.*— * * *

It is hoped that the results on the whole were substantially accurate.

(*k*) *Vital statistics.*—There have been no devastating epidemics during the last 10 years. The register of births is not maintained in the district.

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(*l*) *Emigration and immigration.*—Emigration and immigration in Myingyan follow the barometer. It has long been an established custom in this district to migrate when scarcity threatens and to return when the rains promise a livelihood.

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This year the migration has not been quite so general on account of the better agricultural season which this district has experienced.

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From C. G. B. STIRLING, Esq., Officiating Superintendent of the Northern Shan States, to the Superintendent, Census Operations, Burma,—No. 627—2P., dated the 28th May 1901.

I have the honour to submit a report on the Census operations in the Northern Shan States. * * *

Report on Census operations in the Northern Shan States.

The Census in the Northern Shan States was a non-synchronous one. The area dealt with embraced the whole of the Cis-Salween States, with the exception of West Mang Lôn. This State and all Trans-Salween territory were omitted from the operations, while the Kachin districts of North Hsenwi were treated as an "Estimated area."

2. (*a*) *Non-Synchronous area.*—Enumeration began punctually on the 1st December and was completed in the various States on the following dates :—

In Tawngpeng	...	...	...	3rd January.
In South Hsenwi	...	..	...	10th March.
In Hsipaw	...	...	...	31st March.
In North Hsenwi	...	...	...	22nd April.

3. According to the original scheme the enumeration was to have been done by the local native officials and checked by Government officers. The latter included all the permanent staff and two specially appointed Myoôks, Maung Po Mya and Maung Bwa.

Mr. Thornton, I.C.S. (Adviser to the Hsipaw *Sawbwa*), dealt with the Kodaung, Möng Lông, Möng Tung, and the greater part of Eastern Hsipaw; Saw Lon Saing, Town Magistrate, with Hsipaw town and home district; Myoôk Hkun Mong with Hsumhsai; Myoôk Maung Po Mya with Tawngpeng and the rest of Hsipaw; Mr. H. J. Inman, Extra Assistant Commissioner, with South Hsenwi; and Myoôk Maung Bwa with North Hsenwi, where he received some assistance from the Civil Officer at Kutkai and Myoôk Maung Po Mya.

Lashio station was enumerated by Mr. W. Law, officiating Myoôk.

The Railway Census was taken by the Railway authorities.

4. For several weeks before the commencement of the actual enumeration much time was devoted to instructing the local officials in the work which was required of them. The schedule form was carefully explained, and the officials were called upon to fill up a specimen form in respect of their own families, or to enumerate the people in a house near at hand. In the majority of cases this was labour wasted. Those who succeeded in getting some grasp of the work for the moment forgot what they had learnt in the short interval between instruction and enumeration. Others were too illiterate to do the work themselves and too stupid and indifferent to get it done for them. It thus happened that the original scheme, by which the enumeration should have been carried out by the local officials and merely verified by Government Officers, had, to a great extent, to be abandoned. To this general rule there were of course many exceptions. In South Hsenwi, where the majority of the circles are large and prosperous, the local officials are usually of a superior type. Here they did good work after they had once been started. In Hsumhsai also, where the population is chiefly Danu and much Burmanized, the Myoôk got real assistance from the local headmen. But in the rest of Hsipaw State, in Tawngpeng, and in North Hsenwi a regular house-to-house enumeration had to be made by the Government officer, assisted only by clerks drawn from the *Sawbwa's* office. Apart from the scattered character of the population and the difficulties of travel, the only obstacle met with was the ignorance of the native officials. This as has been explained, necessitated a departure from the original scheme over wide areas and added enormously to the labour of the Government officers.

5. The attitude of the people towards the Census was generally that of resigned indifference. They one and all regarded it as a preliminary to an enhanced revenue assessment. Assurances to the contrary were received with more or less polite incredulity. But there was nothing in the way of active opposition. In some cases the officials, even when quite incompetent to give any real assistance, showed a commendable though misdirected zeal. Thus one of them took a security bond from each village headman in his circle, in which the latter bound himself to submit to any punishment the Government in its wrath might inflict should there be a single name omitted from the village list. There were no prosecutions under the Act.

6. The value of the figures obtained varies in the different States. In Hsipaw the Adviser thinks the errors of omission may possibly amount to 2 or 3 per cent. It is improbable that they exceed this in either Tawngpeng or South Hsenwi. North Hsenwi is the most backward of the States, and Census-taking there was most arduous and difficult. It is hard to say how far the returns are under the mark. Probably not less than 5 and not more than 10 per cent., taking all the enumerated districts together.

The omissions made in the first instance, and subsequently detected, were chiefly the very young, the very old, *Pôngyis*, nuns, lunatics, cripples, and the afflicted generally. Recently born children were not mentioned by the head of the house, perhaps through bashfulness; old people past work were not thought worth counting. *Pôngyis* and nuns were left out because their lives are devoted to religion; lunatics and cripples because they are below the level of ordinary beings. It is possible that the last column of the Census schedule will give but an inadequate conception of the numbers of the mentally or bodily infirm in the States. Due allowance must be made for omissions of the character indicated, and also of course for wilful concealments of the other members of a family and for whole households left out. But on the whole I think the results are as good as could reasonably be expected.

So far as is known there have been no very widespead or destructive epidemics within recent years. Vital statistics are not maintained, and any remarks under this head are merely the personal opinions of officers. It can hardly be doubted that the infant mortality is high. The absence of young children is noticeable in many villages, and enquires of the heads of families seldom fail to disclose losses by death. It is believed that this is especially true of the pure Shan population, and it will be interesting to see if the view is borne out by the present Census. Small-pox is endemic (rarely very virulent, rarely very mild), and it must be responsible for a great many deaths in the year.

8. During the past decade a goodly number of persons have returned to their native States, who had left them owing to the disturbances of previous years. No record is available of the number of such people, and the fact can only be stated generally. There has been some migration to Hsipaw from Burma and to North and South Hsenwi from places beyond the Salween, both from British and foreign territory. The southern movement of the Kachin tribes continues. Here and there they have been checked, but on the whole they spread a little farther each year. Kachin villages found in South Hsenwi in Tawngpeng, and in the Möng Lông sub-State of Hsipaw. They have settled on the fringe of the Wa country and in Mang Lōn and have begun to get a footing in Kēngtūng. These latter districts are beyond the area covered by Census operations in the Northern Shan States and are only referred to in connection with the southward movement of the Kachins. It is a serious matter for the Shan population. The more far-sighted recognize it as such, and all keenly resent it. But the Shans have neither the numbers nor the fighting qualities to check the tide.

9. The railway has not yet been opened for traffic beyond Nawnghkio in the Hsumhsai sub-State of Hsipaw. Its influence on the population is still rather a question of the future. But it has already begun to be felt in Hsipaw State. Natives of India have settled at Nawnghkio and Hsipaw town, and stray *buniahs* have penetrated to some of the larger villages along the main cart-roads. Railway construction has of course attracted Indian and Chinese coolies. These are shown separately in the railway returns. The Chinese [locally known as Maingthas (Burmese); Tai No, Tai Na (Shan)] come from the Chinese Shan States. Men of this race visit the Northern Shan States every year. They work at road-making, irrigation, carpentering, sawing timber, blacksmithing, &c., and leave at the end of the dry weather.

The immediate effect of cart-roads is often to reduce the number of the villages through which they pass. Demands for supplies and transport, the trouble of protecting their crops from mules and bullocks, &c., are cordially disliked by the ease-loving Shan. He takes time to realize that he can sell his produce at far better prices than he ever got before. It thus happens that small villages frequently move when a cart-road is opened, while on an established and well travelled route new villages and small bazaars spring up. Instances in recent years of both proceses could be given.

10. No tribe was discovered which has not already been reported on.

11. The cost of the operations was as follows:—

	Rs.	A.	P.
(*a*) Contingencies	434	0	0
(*b*) Pay of two special Census officers from the 25th October 1900 to the 30th April 1901 ...	2,365	12	10
(*c*) Travelling allowance of above	1,407	4	0
(*d*) Pay of two interpreters, one from the 1st November to the 15th April (Rs. 110), one from the 1st November to April (Rs. 113-5-4)	223	5	4
Total ...	4,430	6	2

12. (*b*) *Estimated area.*—The Kachin districts of North Hsenwi were treated as an estimated area. A list of the various circles and the estimated population of each is appended. The latter was arrived at by applying the average ascertained number per household of actually counted villages to the total number of houses in the area. The result of course can only be regarded as an approximation to the true population. Neither the number of households nor the factor by which these have been multiplied has any claim to accuracy. The number of houses has been obtained (*a*) by actual count between November and April, (*b*) from returns made by headmen within the same period, and (*c*) from last year's revenue lists. Reliance can be placed only on the first named, but as the latter returns were connected with revenue assessment it is obvious that they will only contain errors of omission. It may therefore be claimed that the population of the estimated area is at least that stated and perhaps a good deal more.

The area included is not a compact block. It comprises settlements of Kachins in various parts of the State from North to South. Its extent in square miles can hardly be given, but, if desired, a map will be submitted roughly showing the localities embraced.

People of other races living amongst the Kachins are included. Kachins living in Shan or Palaung districts and subject to the authority of the local officials are excluded. These have been enumerated in the standard form. The estimate therefore does not deal exclusively with Kachins, nor does it include all Kachins. A table showing distribution by races is appended.

The average number of persons to a house in the case of the Kachins was calculated from actual count of a small number of villages only. This is regrettable, but it was unavoidable. From the point of view of the Census (as well as for other considerations) the Northern frontier circles had to be visited first. These had not yet been brought under revenue assessment, and no information as to the number of houses, of even or villages, was available. By the times lists of houses had been obtained, but a few weeks remained before the close of Census operations to devote to more settled districts. The newly-administered districts were not

the best places to make a detailed count of families, and time did not admit of any large number of households being dealt with elsewhere. The experience obtained, however, was that Kachin families averaged five persons—two males and three females. It will be interesting to see whether so great an excess of females is shown in the Census of Kachins elsewhere. The only explanation of it here is that many men die by violence, while the women die only in the ordinary course of nature. In the case of races other than Kachins living in the estimated area, the average population per house is based on an actual count of a large number of families.

The Census of the estimated area was carried out by Mr. A. H. Duke, Assistant Political Officer, North Hsenwi.

13. All officers in the Northern Shan States assisted at the Census. Until it was finished the Adviser and the Extra Assistant Commissioner, South Hsenwi, had hardly time for any other work. The special Census officers, Myoôks Maung Po Mya and Maung Bwa, were indefatigable in their exertions, and often did not return to camp till long after dark. Travelling in the Shan States is very laborious, and it is no light matter to be out from morning till night on work like Census enumeration. I beg to submit the services of Mr. H. A. Thornton, I.C.S., Adviser, Hsipaw; Mr. H. J. Inman, Extra Assistant Commissioner, South Hsenwi, and of Myoôks Maung Po Mya and Maung Bwa as worthy of special commendation.

APPENDIX A.

Northern Shan States. Estimated area.

No.	Circles.	Houses.	Males.	Females.	Total.
1	Nā-ti	200	400	600	1,000
2	Nam Hkai	155	340	455	795
3	Pang Kapna	140	280	420	700
4	Kang Mông	298	631	909	1,540
5	Kwang Kaw	200	400	600	1,000
6	Mông Leng	90	220	270	490
7	Tai-Sè	82	180	203	383
8	Law Naw [Part of]	9	18	27	45
9	Pang-Yok [Part of]	92	222	258	480
10	Sè-Nô [Part of]	97	194	291	485
11	Man Wün [Part of]	50	100	150	250
12	Loi Hawm [Part of]	33	66	99	165
13	Pat Ma	150	300	450	750
14	Manssak [Part of]	27	54	81	135
15	Mu-Sè [Part of]	18	36	54	90
16	Mang Hang [Part of]	40	80	120	200
17	Ho-Tao	394	831	1,180	2,011
18	Kapna	232	497	680	1,177
19	Mông Ko	358	823	1,011	1,834
20	Po-Wang	271	600	810	1,410
21	Mông-ya [Part of]	202	406	596	1,002
22	Mông Si	1,013	2,214	3,155	5,369
23	Mông Paw	286	591	855	1,446
24	Mông Htam	538	1,387	1,401	2,788
25	Mông Wun	758	1,713	2,086	3,802
26	Ho-Pyet	191	414	545	959
27	Ti-Ma	430	864	1,039	1,903
28	Sao-Pum	164	356	488	844
29	Pang-Kai	145	407	508	915
30	Pang Hok	213	426	637	1,063
31	Ho-Maw [Part of]	50	100	150	250
32	Hpak-Yai [Part of]	180	360	540	900
33	Loi Kang	50	100	150	250
34	Konghsa	75	150	225	375
35	Nga-Kyem	119	239	335	574
36	Ta-hkai [Part of]	70	170	210	380
37	Pang Kut [Part of]	417	830	1,099	1,929
38	Hsai-Hkao	178	349	426	775
39	Hao-Kang	81	156	229	385
40	Hsam Pu	34	71	95	166
41	Hpa-Sawm	103	195	259	454
42	Nam Nak	77	163	199	362
43	Tunsô	60	120	180	300
44	Loi Lai [Part of]	90	220	270	490
45	Loi Pe	150	300	450	750
46	Man-Aw	40	80	120	200
47	Ing-Mông	80	160	240	400
48	Nam Paklông	50	100	150	250
49	Warrapum [Part of]	71	140	218	358
50	Ning Lom [Part of]	111	216	332	548
	Total ...	8,962	19,269	25,858	45,127

APPENDIX B.

Distribution by Races.

No.	Race.	Houses.	Population.		
			Males.	Females.	Total.
	Kachins	5,702	11,404	17,106	28,510
	Palaungs	1,439	3,454	3,948	7,402
	Shans	1,046	2,307	2,929	5,236
	Chinese	716	1,938	1,732	3,670
	Lisaw	59	166	143	309
	Total ...	8,962	19,269	25,858	45,127

From A H. HILDEBRAND, Esq., C.I.E., Superintendent and Political Officer, Southern Shan States, to the Superintendent, Census Operations, Burma,—No. 910—4-C.1, dated the 19th April 1901.

I HAVE the honour to forward copy of the report of the Extra Assistant Commissioner, Myelat division, together with his charge and circle summaries in original, and copy of his letter No. 457-1C., dated the 8th instant.

* * * * *

Mr. C. E. Browne has taken immense trouble to obtain a reliable Census, and from what I saw in my tours in his division in November and December 1900, I can confidently accept his figures as the nearest to absolute accuracy as are to be obtained. He is to be commended for the result of his personal care, assistance, and supervision, without which the figures would have been of no value.

The Chiefs and clerks specially mentioned by him in Part II of his report are also worthy of commendation.

* * * * *

CENSUS OF THE MYELAT STATES AND LOILÔNG.

I.—Preparatory work.

On the 17th August the fifteen Chiefs in this charge were informed of the orders of Government regarding the non-synchronous Census of their States and were given full instructions as to what they were to do to get a correct enumeration of their people. Between that date and the 1st of December all the States were visited by me and the clerks were instructed what to do and how to fill up the standard schedule. House-numbering was done satisfactorily in most of the States and many persons took pains to paint their numbers and decorate their boards.

In Loi-ai neat tin-plates were supplied to all the houses. In Loilông State the numbering of houses was very backward; and in a few villages in Namhkai State the numbers were all wrong, due to the families being enumerated before the numbers were put up. When the number boards were sent out from the Chief's court the people, being ignorant [illegible] were unable to decipher them and put up the boards which took their fancy. Steps were taken to put them right as soon as the confusion of numbers was detected. In [illegible] a few cases numbers were put where they could not be seen and others were carefully [illegible] away inside houses to prevent their being damaged by rain or by children.

The Enumerators were clerks attached to the Chiefs' offices and clerks temporarily [illegible] for the purpose. They were men who belonged to the States and were assisted in [illegible] work by the village and circle headmen. Rupees 400 was sanctioned towards the ex[illegible] of the extra establishment entertained in each State, of which a sum of Rs. 40 remain[illegible] unexpended.

II.—The Census itself.

[illegible] Enumerators started work on or shortly after the 1st of December. The rolls in [illegible] instance were prepared on Shan paper and were produced for my inspection when [illegible] each State. Villages here and there which showed a preponderance of males or [illegible] of children were visited and checked. Bazaars were also visited and people called [illegible] and examined as to the entries shown against them.

[illegible] There was no final enumeration on the night of the 1st March. After the [illegible] written on Shan paper had been scrutinized and passed they were re-written on [illegible] forms and done up into books, village by village, and despatched to my office [illegible] abstract similar to the "circle summary." All the schedules of the fourteen Myelat

States reached my office by the 1st March, but the last of the Loilông schedules did not reach my office till the 23rd March, due to the failure of some of the clerks to properly enumerate the Karens and Taungthus in out-of-the way parts of the State. The Myoza, when he discovered how inaccurate some of the rolls were, ordered a fresh enumeration and did not get the revised rolls till the 27th February. The State (Loilông) is an extensive one of 1,600 square miles, the country is very hilly and difficult to get over, and the Karens in the southern parts are no more advanced then the Karens of Karenni who have been excluded from Census operations.

In the Loi-ai State the first enumeration appeared faulty. A second was made at my request and resulted in an increase from 5,388 to 5,553. In the Namhkai State there was a tendency to omit infants and children of tender age The clerks were sent round a second time and on their return were able to show an increase from 6,576 to 6,779.

The Chiefs were expected to supervise the work in their respective States, but as some were old and decrepit and unable to read or write, and one (the Maw *Ngwègunhmu*) was incapacitated through illness, very little could be expected from them beyond using their influence in seeing that a proper Census was made.

Of the other Chiefs I think the *Ngwègunhmu* of Pwehla, A.T.M., and the Myoza of Hsamônghkam, A.T.M., displayed the greatest energy and did all they could to get a correct enumeration of their States. Among the clerks I should especially commend the services of Maung Po Taik, Maung Pe Thit, and Maung Thè of the Pangtara State, Maung Po Mya of the Mawnăng State, Maung Sein of Loimaw State, and Maung Ba of the Pangmi State and Maung To, Maung Hlaing, and Maung Lat of the Loilông State and *Amat* U Yan Shin of the same State.

Hkan Yon, the Hsamônghkam Myoza's brother-in-law and right-hand man, took an intelligent interest in the Census work of the Hsamônghkan State and assisted also in completing the work of the Kyawkku State.

(*c*) The Enumerators' and Supervisors' abstracts were prepared in the Chiefs' offices and stamped with their Court seals. All the abstracts and village Census books were checked by me as far as possible and signed.

(*d*) The Census of the whole charge was taken non-synchronously and was completed on the 27th February.

(*e*) No part of the charge was excluded from Census operations.

(*f*) There were no prosecutions under the Census Act and, as the work was done by local agencies under the direct supervision of the Chiefs, there was no friction and no unpleasantness displayed by any of the races inhabiting the States of the Myelat. It might have been otherwise had Burmese clerks been imported for the purpose.

(*g*) Rupees 400 was sanctioned for extra establishment for taking the Census, of which Rs. 360 was actually paid.

At the Census-taking of 1891 the Maw State was under the Deputy Commissioner of Kyauksè and was censused, synchronously with the rest of the district. The other States were excluded from the regular Census operations, but were, during the dry weather of 1891, subjected to a rough enumeration conducted by the local officers and native officials. Since then each State has been twice enumerated for the quinquennial tribute arrangement; making in all, with the present Census, four enumerations during the past ten years. The people have thus come to understand what a Census is and the local officers and native officials have less difficulty in getting correct statistics. A comparative statement is attached † showing the variations in population, from which it will be seen that at the Census of 1891 the estimated population was only 58,375, in 1892-1893 it was estimated at 104,901, in 1896-1897 (when rolls were prepared of each household) it rose to 105,563, and at the present Census to 119,415, which, taking everything into consideration, is as accurate a non-synchronous Census of the Myelat and Loilông States as it is possible to make it.

* * * * *

(*i*) Eight thousand five hundred Census schedule forms in Burmese and 5 in English and 1,500 outer covers were received from the Press, out of which 8,400 Burmese schedules, two English schedules, and 1,400 outer covers were used in the States.

The enumeration books were checked by me with the circle lists and done up into bundles in accordance with the Census Superintendent's letter No. 214—2C.O., dated the 20th February. Regarding the compilation of the Census schedules, I should like to make the following remarks:—

(*a*) The rule requiring a blank line to be left between each household has not been rigidly observed by all the Enumerators.

(*b*) The block numbers have not been entered, as villages were not divided into blocks.

(*c*) The ages of Karens, Palaungs, Taungthus, &c., are entered approximately only, as these people keep no horoscopes and keep no account of the years.

† Not printed.

In some cases, especially in Loilông, infants under one year have been shown as one year of age instead of as "infants."

(*d*) The septs of the Karens are shown in column 8 as Karenni, Zayein, Karenbyu, Kalasè, Gaungto, and Palaung.

The other races, Danu, Taungthu, Taungyo, and Shan are not divided into septs.

(*e*) Of the languages shown in column 13, Taungyo, Intha, and Danu may be considered as dialects of Burmese.

Palaung is a dialect of Shan as well as Danaw.

From A. H. HILDEBRAND, Esq., C.I.E., Superintendent and Political Officer, Southern Shan States, to the Superintendent, Census Operations, Burma,—No. 1322--4C.-1, dated the 29th May 1901.

In continuation of my letter No. 1186—4C.-1, dated the 17th instant, I have the honour to forward you copy of letter No. 412—44M.-1900-01, dated the 27th May 1901, together with a copy of report and the divisional charge and the charge summaries in original from the Extra Assistant Commissioner in charge of the Central division. The schedules are being sent separately.

2. From a personal visit to almost every State in the division while the Census was going on, I consider that the Census as a whole may be regarded as correct, and that, owing to the exceptional trouble taken by Mr. Kiernander, in which I was also able to render some assistance, as I happened to be inspecting there at the critical time, the columns of "Occupation" and "Subsidiary occupation" are more reliable than in any of the other divisions.

3. The houses and population in this division are considerably in excess of those in any of the others. The expenditure is far below that of the other divisions, and, with the exception of the Myelat, the figures for "Occupations," both permanent and subsidiary, are by far the most reliable.

The extra time and trouble given to it and the better system of working is to a great measure responsible for these better results.

The work was a heavy one in every division, but the heaviest probably in this.

Mr. D. W. Kiernander is to be congratulated on having done it so efficiently.

From D. W. KIERNANDER, Esq., Extra Assistant Commissioner, in charge Central Division, Taunggyi, to the Superintendent and Political Officer, Southern Shan States,—No. 412—44M.-1900-01, dated the 27th May 1901

I have the honour to submit my report on the Census of the Central division, Southern Shan States, with the divisional charge and the charge summaries for the 12 States.

* * * * *

CENSUS OF THE CENTRAL DIVISION, SOUTHERN SHAN STATES, 1901.

I.—Preparatory work.

During the rains the twelve Chiefs in the charge were informed of the orders of the Government regarding the non-synchronous Census of their States, and were given full written instructions on the subject.

Instructions were issued that between the dates of the 1st December 1900 and the 13th February 1901 the Census had to be started and finished on Shan paper. During the months of August, September, October, and November 1900, I personally visited all but the two States of Sa Koi and Möng Pai and further instructed them how to fill in the standard schedule which had been ordered to be used for the non-synchronous Census. They were also instructed how to arrange the villages into blocks, circle by circle.

The officials of Möng Pai and Sa Koi States during September came in with their budgets and the standard schedule was explained to them and printed instructions given.

(*a*) The Enumerators were all local men and were the clerks of the Chiefs and were assisted by village and circle headmen.

A sum of Rs. 800 was sanctioned for the entertainment of extra establishment, of which Rs. 29-0-6 was all that was expended for the entertainment of one clerk to generally assist the Chiefs and to aid me in supervising the Census returns.

II.—The Census itself.

Though instructions were given to start house enumeration on the 1st December 1900, the only States that actually started on the day were Lai Hka and Möng Küng, where I personally was at the time on the 11th December 1900. I arrived at Lawk Sawk town and found the Census on Shan paper written up for the town. It was so carelessly done that I stopped and personally took the Enumerators round and had the town written up by them in my presence. On the 24th December I visited Yawng Hwe town and found the Census for

the town completed. A few mistakes in the column of workers were pointed out and 40 Enumerators and 10 Supervisors were each set to start the work in the outside villages. I then proceeded to Samhka town and found the Census had been completed, except for two circles. They had made the same mistakes as Yawng Hwe, which were duly corrected. Then proceeded to Sa Koi and found Census had not been started (9th January 1901.) As the State was a small one I decided to personally write it up with my clerk and the State Enumerator, 150 houses. This was done in two days by us and the State Enumerator left to finish the remaining houses. On the 11th January 1901 I arrived at Möng Pai and found nothing done, or any arrangement made to take the Census. The *Sawbwa* was instructed to bring up ten men who could read and write, and I stopped three days and, with the assistance of my clerk and Veterinary Assistant, wrote up six villages with the men produced by the *Sawbwa* and arranged that they should at once start work on Shan paper and finish it up all before the 13th February 1901. I then left and crossed over to Hsa Htūng State and found that the Tabet circle had been written up and on checking found many houses and people left out; therefore I took away the enumeration papers and started it afresh by personally taking each enumerator and making him write up a village in my presence. From here I proceeded on to Wanyin and found that no attempt had been made to start the Census owing to the annual festival going on.

The administrator was instructed to bring up an Enumerator for each circle and I personally with my clerk went out and had a village written up by each Enumerator. From here I went on to Nawng-wawn and found the Census completed, except for one circle. I personally went round and checked two circles and found the subsidiary work column was not understood and wrote it up and sent out each enumerator to correct his charge. From Nawng-wawn I went to Namhkôk and found the Census finished and the abstract for preliminary figures ready. On checking the same I found a few mistakes which were rectified. Then went on to Hopông and found the Census had been finished. On checking the same from house to house found over 300 people in one circle had been left out owing to the laziness of the clerk, who would not write up the names of each person given by the house-owner (30th January 1901). On looking through the other circle lists further mistakes were made. I therefore took away all the papers and asked the administrator for nine Enumerators and put on one man to each circle and personally with my clerk spent three days with the Enumerators, writing up each house in every village, and then left with instructions to finish their work in ten days. I then went in to headquarters for a few days and returned to Hopông and checked the circles that had been finished and found them well and correctly written up. I then proceeded on to Lai Hka State and checked the Census all the way to the town and found every house properly written up, but they had gone wrong in the subsidiary work columns, so it was arranged that the Enumerators were to go out again and correct them.

I then proceeded to Möng Küng State and checked three circles on the way and found the schedule properly entered up and the abstract given in. At Möng Küng all abstracts were received and the charge abstract sent in to the Superintendent of the Southern Shan States for incorporation.

(*b*) There was no final enumeration or check on the 1st March 1901.

(*c*) The Enumerators and Supervisors' abstracts were prepared in the office of each Chief and were checked by myself and my two clerks. Each Supervisor's abstract is stamped by me and also stamped with my office seal and attached to the circle Enumertor books.

(*d*) The Census of the whole divisional charge was taken non-synchronously and completed on Shan paper on the 13th February 1901. The copying from the Shan paper on to printed schedules was completed for eleven States by the 10th April 1901. The schedule from the State of Yawng Hwe was finished on the 15th April and received by me on the 21st April. The delay is due to the durbar and the Census schedules intended for this State being sent to Kēngtūng.

(*e*) No part of the divisional charge was excluded from the non-synchronous Census.

(*f*) No prosecution was made. The administrator of Hopông dismissed one of the clerks for careless work.

(*g*) The 12 States in 1900 showed an estimated population of 281,116 souls.

The divisional and 12 charge summaries attached give the details of the population, State by State and circle by circle, also the grand total for the twelve States in the charge.

(*h*) Originally 12,000 schedules in Shan and 12,000 in Burmese with 2,000 covers of both kinds were received. Shan schedules were only required for one State, *i.e.*, Möng Küng; consequence being a further supply of 6,000 Burmese schedules had to be indented for, the last 2,000 for Yawng Hwe being sent to Kengtūng. I did not receive them till the 22nd March 1901.

The enumeration books were checked by me with the assistance of my two clerks and were all done up into bundles and circle summaries attached thereto.

Comparative Statement of the estimated population of 1900 and non-Synchronous Census of 1901.

No.	Name of State.	Estimated population, 1900.	Census of 1901.	Remarks.
1	Sa Koi (Sagwe)	1,316	1,387	
2	Samhka (Saga)	11,640	7,640	
3	Möng Pai (Mobyè)	22,975	19,328	
4	Lawksawk (Yatsauk)	27,810	24,614	
5	Hopông (Hopon)	10,465	10,804	
6	Namhkôk (Nankok)	6,965	6,686	
7	Nawng Wawn (Naung Mun)	5,430	4,804	
8	Laihka (Legya)	25,340	25,793	
9	Hsahtūng (Thatôn)	8,465	9,784	
10	Wanyen (Banvin)	10,005	10,192	
11	Möng Küng (Maingkaing)	34,005	30,308	
12	Yawng Hwo (Nyaungwe)	1,16,700	92,645	
	Total ...	281,116	253,985	

The State of Möng Pai has never been enumerated and the estimated population is 3,547 in excess of the Census.

Endorsement by A. H. HILDEBRAND, Esq., C.I.E., Superintendent and Political Officer, Southern Shan States,—No. 1186-4C.—1 of 1900, dated the 17th May 1901.

Copy of the following forwarded to the Superintendent, Census Operations, Burma, with the regret at the delay in submission of the complete schedules, which was caused by the durbar held in Taunggyi on the 27th March last.

The Census of houses and population I consider, from a personal visitation and enquiry throughout the Eastern division, to be trustworthy. The details as to age and occupation may be considered as approximate only from ignorance on the part of the Chiefs and their Enumerators and of the people themselves.

That Mr. Gordon deserves great credit for having been so successful in obtaining so correct a Census I can testify from personal supervision in each State in his charge.

From D. M. GORDON, Esq., Extra Assistant Commissioner, in charge Eastern division, Southern Shan States, to the Superintendent and Political Officer, Southern Shan States,—No. 260, dated the 10th May 1901.

I have the honour to submit the Census returns for the Eastern division, Southern Shan States.

With the returns of each circle, summaries are submitted.

The charge summaries, together with a divisional summary, tabulating the total figures of the various charges in the division, and a memorandum, as called for in your Circular memorandum No. 350-4C.—1 of 1900, dated the 22nd February 1901, are submitted.

Memorandum by D. M. GORDON, Esq., Assistant Commissioner, on the Census in the Eastern division, Southern Shan States.

The Eastern division, Southern Shan States, comprises the 11 Shan States, marginally noted, each under a separate ruling Chief. The area of the division is computed at roughly 12,000 square miles, about as large as the kingdom of Holand.

Möng Nai *cum* Kēngtawng.
Mawkmai.
Möng Pan.
Möng Sit.
Möng Pawn.
Kēnghkam.
Möng Nawng.
Kehsi-Mansam.
Kēnglôn.
Möng Hsu.
Möng Sānd.

Distribution of work and adency employed.

2. For ensus operations the divisions was divided into 13 charges, the main State of Möng Nai and its sub-State of Kēngtawng being worked as separate charges, the civil station of Bampôn (the head quarters of the division) and the Survey Party at work being considered also as separate charges.

The undersigned was general Charge Superintendent, assisted by five Shan lads one Taungthu (literate in Shan and Burmese), and one Gurkha.

The actual Census, which was non-synchronous throughout, was carried out entirely by local agency, that is, by the Chiefs of the various States, excepting the enumeration of the natives of India in the Public Works Department employment, in which work the Gurkha was employed, the enumeration of the military police at Bampôn, which Captain A. H. W. Lee, Assistant Commandant, kindly conducted, and the enumeration of the Survey camps, which the clerk to the Survey Party compiled.

* * * * *

3. The actual numbering of the houses and preliminary enumeration, in lead pencil on Shan paper, began in December and was completed in the more backward charges about the middle of February, the provisional totals being received on the 18th of February.

Preliminary work.

Every charge was visited by the undersigned and general personal supervision and check of the work exercised up till the 27th February, the date fixed for the cessation of enumeration.

4. Twenty-eight *per cent.* of the enumeration by the Chiefs was checked by the six local men employed (referred to in paragraph 2 above) in addition to the personal check by undersigned.

Check and final work.

After the actual enumeration was at an end, the interest flagged when the labour of copying on to the standard schedules began. The labour, entailing entries against over 200,000 souls, was immense. In two charges (Mōng Hsu and Mōng Sāng) the schedules had to be written up in lead pencil, the local officials being backward at the use of the pen. A durbar was held by His Honour the Lieutenant-Governor in March at Taunggyi and during the absence of the Chiefs from their States till about the middle of April the underlings rested, the result being that the final schedules were only completed on the 8th May.

5. On the whole the Census figures in population are fairly trustworthy, considering the vast area of the division, the agency employed, and the paucity of reliable check.

Value of returns.

Practically it was only after the receipt of the provisional totals that leisure was found for detailed criticism of the entries in the village lists. What corrections could be made were then ordered, but most of the work is according to the lights of the local enumerators.

The particulars under the "occupation" columns are the weakest items in the schedules, the average local comprehension of what was wanted having been very vague.

The "birthplace" column raised considerable difficulties and in the schedules the entries "Shan country" or otherwise only are shown.

The ages naturally amongst such primitive people are somewhat approximate and it is feared that column 6 has been used sparingly.

6. There was no opposition on the part of the people to the taking of the Census.

The various indigenous races comprising the population are described in the *Upper Burma Gazetteer*.

From Captain G. DRAGE, Assistant Political Officer, Kēngtūng, to the Superintendent and Political Officer, Southern Shan States,—No. 71, dated Camp, the 30th April 1901.

I have the honour to submit my report on the Census of the Kēngtūng State, together with the charge summary.

The schedule books, together with the circule summaries attached to the respective circles, were despatched from Kēngtūng on the 20th April by the Head Clerk. Before my departure on the 9th March from the civil post at Kēngtūng, I had personally checked all the Shan paper Census schedules on which the Census was first entered.

I checked all the village abstracts which were entered on the last page of the Shan paper schedules of each village.

These village abstracts I myself entered in the office copies of the circle summaries and circle totals in the charge summary now attached.

On the 6th March I wired the Census provisional totals as follows: "Houses 37,171, total "persons 190,169, males 96,461, females 93,708, monasteries being reckoned as two "houses."

* * * * *

From after the 25th March, when the Enumerators began to come in with their Shan paper schedules, the Burman Supervisor, assisted by nine Shan clerks and 57 Enumerators, was busy, occupied in copying from the Shan paper schedules on to the printed schedules as well as writing out the village names on the printed circle summaries and entering the village and circle figures from my manuscript lists taken as described above from the Shan paper schedules.

* * * * *

CENSUS IN THE KENGTUNG STATE.

I.—*Preparatory work.*

* * * * *

In October the *Sawbwa's* revenue-collecting officials went out from Kēngtūng, and were ordered by the *Sawbwa*, after being instructed by me, to give house numbers to every house in the villages, village numbers and circle numbers. By the middle of January these officials returned stating they had done as directed and they gave a total of 35,490 houses in the State as the result of their revenue and enumeration visit.

In October I got the *Sawbwa* to have numbers similar to the above distributed in the town, home circle, and *ho-hois* or neighbouring circles, and I spent the whole of November checking these numbers and enumerating the houses and monasteries. I was accompanied by four of the *Sawbwa's* Shan clerks to learn from me how the enumeration should be carried out, and I enumerated 6,746 houses with 34,516 people, including the inmates of monasteries. I also made a house-to-house revenue survey of the whole of the Kēngtūng town and home circle.

* * * * *

From the 1st January one of the *Sawbwa's* ministers with six Shan clerks, and from the 1st February, in addition to them, a Burman Supervisor assisted by three Shan clerks, was engaged in preparing preliminary circle lists and filling up as many headings as possible on the printed schedules when they were received.

II.—*The Census itself.*

Previous to the enumerators starting out, copies of lists of villages with the number of houses in them which each enumerator was to enumerate were given to each Enumerator; careful provision was made to ensure that a man who had a distant circle or difficult hill villages was compensated by having fewer villages given him so that he might complete within the same time as Enumerators with easy Shan villages. On the 25th February 1901, 57 of the *Sawbwa's* Shan clerks were sent out to nominally help the circle headmen, but practically to do the enumeration themselves assisted by the circle headmen in case the Enumerators should be pressed for time.

An average of 100 houses to be enumerated in each week was allotted to the Enumerators who were directed to be back by the 25th March.

By the 5th March all but one Enumerator was present. I rode and met him with his schedules on the 5th, returning to Kēngtūng in time to wire the provisional totals on the 6th.

The man had been delayed by trying to find some hill villages, the inmates of which had dispersed on account of small-pox.

* * * * *

(*g*) Rupees 600 was sanctioned for extra establishment for help with the Census clerical work and the whole of this amount was spent.

(*h*) The inhabitants of the two military posts at Kēngtūng were enumerated and the return submitted by the Officer Commanding Kēngtūng separately from the State of Kēngtūng.

* * * * *

From W. G. WOOSTER, Esq., Assistant Political Officer, Karenni, to the Superintendent and Political Officer, Southern Shan States,—No. 665-23M., dated the 3rd April 1901.

I have the honour to submit herewith the Census figures for Karenni with the following remarks on the manner the figures have been obtained by me and as to their reliability:—

1. On receipt of your letter No. 162-4C.—1, dated the 24th January 1900, steps were taken by me to commence making a preliminary enumeration of the States in Eastern and Western Karenni through their Chiefs, and the Chiefs were first addressed by me on the subject and then, as opportunity offered, I personally explained to them that Government every ten years counted the population of the whole of Burma, in order to allay suspicion. The Chiefs showed some interest and readily offered to render me every assistance in their power.

The Chiefs in Karenni are illiterate and their clerks and courtiers as a rule are poorly educated, and it behoved me to do the best I could under the circumstances.

2. All the Chiefs, I am glad to say, displayed considerable energy in making as complete a list as possible of the number of houses and inhabitants in their charges, and they have all furnished me with very nice and neat lists of the number of villages, houses, with the population given as male, female, boys, and girls.

In Karenni proper I felt assured of obtaining a pretty reliable return and my personal attention was therefore given to the Brè-Padaung Tracts. I am glad to be able to note, that, thanks to the energy and interest displayed by the Chief of Kyebogyi, who personally conducted me through the Brè country within his charge and assisted me in enumerating villages, I am able to say that, in my opinion, the return of figures showing the Brè population is very fairly represented. I personally counted and enumerated 146 Brè houses. In some instances the Chief's list showed one or two houses too many and in some too little, but the population was fairly correctly recorded. Personal enumeration was always a tedious task, as there was always half an hour or more lost in discussing with the headman as to whether he would tell how many people were in the village or not. In the Kyebogyi State proper I personally counted and enumerated 132 Red Karen houses and 130 Mano houses. The Chief and his clerk always accompanied me and, when necessary, their list was corrected.

I found the population in the Brè *Hinterland* a purely agricultural people, just growing sufficient paddy and vegetables and chillies for their own consumption with of course the small crop of millet seed for their liquor, and they were all very poor.

In the Bawlaké State I was accompanied by the Myoza's clerk and one or two petty officials and personally inspected their work. I visited and counted 416 houses in 12 Yinbaw villages besides 16 Brè, 46 Padaung, and 30 Shan houses within the State. I also received some assistance from Rev. Dr. Bunker, of the American Baptist Mission at Daw-che-i, in testing the density of Padaung houses near the Mission, so that on the whole the figures for Bawlakè are fairly reliable.

With regard to the Kantarawadi State the Chief, Sawlawi, took considerable pains in furnishing me with the figures for the State. I had personally taught his clerks what they should do, and the clerks and the officals appear to me to have done their duty very well, judging from the personal check exercised by me on their figures.

The small States of Naungpale and Nammekôn have also supplied me with reliable figures to work upon. Two days ago the Rev. Dr. Johnson, of the American Baptist Mission, came to see me in Loikaw and we roughly went into the figures and the Rev. Missionary agreed with me that the Chiefs undoubtedly had a very good idea of what was in their States and he considered my figures as a very fair representation of the population in Karenni.

I am of opinion that the Census figures now submitted are as accurate as can be estimated under the circumstances, and that they represent very fairly the population of Karenni I am assured.

From all that I could gather during my tour there is very little doubt that the Red Karen population has dwindled away of late years and that immigration is the principal cause. During last year there appear to have been a number of deaths from fever and small-pox, and I always found a superabundance of females. This may also be said of the Padaungs and in some villages in the Brè country.

The difference between the figures submitted by wire is due partly to a clerical error and partly to the omission in the list of the Kantarawadi State of a whole circle.

Name of State.	Number of houses.	Men.	Women.	Boys.	Girls.
Kantarawadi	7,797	8,204	7,397	5,418	5,314
Bawlakè	1,819	2,071	1,963	954	713
Kyebogyi	2,761	2,612	3,266	2,075	1,914
Nammèkôn	763	696	923	511	499
Naungpalè	432	431	488	176	170
Total ...	13,572	14,014	14,037	9,134	8,610

Kantarawadi State.

Name of State.	Number of houses.	Men.	Women.	Boys.	Girls.	Race.	Religion.	Occupation.
Kantarawadi.	11	33	10	11	1	Chinese ...	Buddhist ...	Traders.
	150	217	176	136	124	White Karen	do ...	Cultivators.
	2	2	4	1	1	Talaing ...	do ...	Traders.
	108	161	143	81	68	Intha ...	do ...	do
	3	3	3	...	...	Danu ...	do ...	Carpenters.
	16	24	18	7	14	Siamese ...	do ...	Coolies.
	314	383	425	206	211	Taungthu ...	do ...	Traders.
	1,862	2,315	2,314	1,235	1,162	Shan ...	do ...	do
	87	146	122	72	50	Burmese ...	do ...	do
	2	2	...	...	...	European ...	Christian...	Officers.
	6	11	5	...	...	Punjabi ...	Hindu ...	Milkmen.
	...	111	22	16	13	Gurkhas ...	do ...	Military Police.
	2	4	1	...	...	Natives of India	Mussulman	Government servants.
	6	6						
			8	5	5	Padaung ...	Nat ...	Cultivators.
	5,228	4,786	7,397	3,648	3,665	Karenni ...	do ...	do
Total ...	7,797	8,204	5,418	5,418	5,314			

Bawlakè State.

Name of State.	Number of houses.	Men.	Women.	Boys.	Girls.	Race.	Religion.	Occupation.	Remarks.
Bawlakè	146	150	160	38	40	Karenni .	Nat ...	Cultivators.	
	83	60	77	36	40	Yintalè ...	do ...	do.	
	132	150	165	28	38	Manŏ ...	do ...	do.	
	38	58	55	7	6	White Karen	do ...	do ...	Part work tin
	480	516	470	267	178	Padaung ...	do ..	do.	
	660	742	726	468	318	Yinbaw ...	do ...	do.	
	56	57	59	30	14	Brè ...	do ...	do.	
	203	306	230	75	71	Shan ...	Buddhist	Cultivators	And traders.
	6	11	5	2	3	Burmese ...	do ..	Traders.	
	5	6	7	1	1	Siamese ...	do ...	Coolies.	
	5	7	6	1	3	Intha ...	do ...	do.	
	5	8	3	1	1	Taungthu ...	do ...	Cultivators	
Total ...	1,819	2,071	1,963	954	713				

Kyebogyi State.

Name of State.	Number of houses.	Men.	Women.	Boys.	Girls.	Race.	Religion.	Occupation.
Kyebogyi	1,280	1,158	1,625	1,003	775	Karenni ...	Nat ...	Cultivators.
	257	237	290	200	198	Manŏ ...	do ...	do.
	981	974	1,110	575	681	Brè ..	do ...	do.
	242	242	241	297	260	White Karen ...	do ...	do.
	1	1	...	...	...	European ...	Christian ...	R. C. Priest.
Total ...	2,761	2,612	3,266	2,075	1,914			

Nammèkôn State.

Name of State.	Number of houses.	Men.	Women.	Boys.	Girls.	Race.	Religion.	Occupation.
Nammè-kôn	48	70	65	39	45	Intha ...	Buddhist ...	Cultivators.
	59	68	82	56	50	Shan ...	do ...	do.
	629	526	744	403	385	Karenni ..	Nat ...	do.
	27	32	32	13	19	Padaung ...	do ...	do.
Total ...	763	696	923	511	499			

Naungpalè State.

Name of State.	Number of houses.	Men.	Women.	Boys.	Girls.	Race.	Religion.	Occupation.
Naung-palè.	282	283	341	86	81	Karenni ...	Nat ...	Cultivators,
	30	36	40	22	25	Shan ...	Buddhist ...	do.
	6	8	7	5	5	Taungthu ...	do ...	do.
	112	106	100	63	59	Padaung ...	Nat ...	do.
	1	2	...	...	...	European ...	Christian ...	A. B. Missionaries.
	1	2	...	...	...	Natives of India ...	Hindu ...	Servants.
Total ...	432	431	488	176	170			

From E. O. FOWLER, Esq., Officiating Superintendent, Chin Hills, to the Superintendent, Census Operations, Burma,—No. 49—18C., dated Camp Champhai, the 20th March 1901.

I have the honour to submit herewith a report on the Census operations in the Chin Hills as directed in your Circular No. 24 of 1901.

The operations were confined to the area defined in Political Department Notification No. 10, dated the 1st May 1897.

With the exception of the stations and outposts the Census of the district was non-synchronous. All arrangements for carrying out the work were completed during the rains of 1900.

The work was commenced on the 23rd November 1900 and completed on the 25th March 1901.

The district was divided into three subdivisions, and for Census purposes each subdivision was treated as a Census charge, and the Assistant Superintendents in charge of the subdivisions as charge Superintendents. Each charge was divided into circles.

Five special clerks were entertained and distributed as follows, one to the Tiddim subdivision, two to Falam, and two to Haka. Of these clerks, one, Maung Shwe Zin U, proved useless, as owing to extremely bad health he was unable to undertake any work whatever. His services were dispensed with and the staff reduced to four. These clerks, with the exception of one, were furnished by the Census Superintendent. The period for which they were sanctioned was four months only and their rate of pay was Rs. 50 per mensem.

The staff of Enumerators consisted of Chins, half-bred Chins, Political interpreters (Burmans), and sepoys.

In the Tiddim subdivision none but Chins were employed as Enumerators. Curiously enough these men, eight in number, belonged to the Siyin tribe, the members of which are undoubtedly the most savage and lawless in the hills. These Enumerators had a knowledge of Burmese, and during the rains of 1900 were taught to read and write. They proved a great success.

* * * * *

In the Falam subdivision four Enumerators were comprised of Shunshi Chins. These men had a good knowledge of Burmese and were able to read and write well.

* * * * *

In the Haka subdivision four Chin-speaking sepoys, two Political interpreters, and two Chin-speaking Burmans were employed as Enumerators.

The Enumerators were paid at the rate of Re. 1 for every forty houses correctly enumerated.

The work of enumeration commenced almost simultaneously in all three charges and was carried out circle by circle. Political interpreters and, in some cases, clerks were placed in charge of a certain number of Enumerators and made responsible that they performed their work correctly. The Enumerators visited every house in the charge and entered the name of the ordinary inhabitants of the house and not the number actually found present. Their work was then carefully checked by the interpreter in charge. The Charge Superintendent (Assistant Superintendent) in turn checked personally as many villages as possible in each circle. Any strangers who were found present at the time of enumeration and who were not likely to have been enumerated elsewhere, were duly entered in the schedules, and slips of paper bearing the work "enumarated" were furnished them. These slips they were told to produce in case it was desired to enumerate them again. The Enumerators were furnished with wite flags fastened on sticks. A flag was placed on each house as it was enumerated, and so a glance at the village from some spot above it disclosed at once whether any houses had been omitted. A good check was by this means kept over the work. Another good means of checking was also employed. Eeach interpreter would collect the Chiefs and headmen of the villages enumerated by the Enumerators in his charge, and by causing each headman to produce a stick or a stone for each inhabitant of his village, was able to check the returns shown in the schedules. A headman is supposed to know the name of each man, woman and child in his village, and curiously enough with a little help from an elder or two of the village, he generally does, his memory but seldom failing him.

A little difficulty was experienced in the Falam subdivision. Mr. Street, on first checking the Falam group of villages, found that many names had been omitted to be given in, and that in consequence the average number of inhabitants per house was absurdly small. The Falam Chiefs were called into Falam and warned by me that any more such tactics would be met with exemplary punishment. The villages, five in number, which included the head village of Falam, were re-enumerated and a great increase in the number of names obtained. The average per house as compared with other villages showed that the correct number had now been given in. All five villages were fined in small sums.

* * * * *

Prosecution and attitude of people.—There were no prosecutions under the Census Act. Five villages were prosecuted under the Chin Hills Regulation for disobeying orders in failing to give up names to Enumerators. In each case the entire village was fined and the aggreate fines amounted to Rs. 95.

The attitude of the people on the whole was satisfactory.

* * * * *

Synchronous Census.—On the completion of the village Census, Enumerators were placed in each station and outpost. A preliminary Census was taken in each post before the 1st March, and on the night of that day (1st March) the final enumeration took place. Every care was taken to include in the schedules people moving between posts on the night of the final enumeration, and the work appears to have been carried out most satisfactorily and with accuracy.

* * * * *

Total cost of operations.—The total cost of the operations, including pay of clerks, was Rs. 1,552-5-11. * * * The amount sanctioned was Rs. 2,000, so that a saving of Rs. 447-10-1 has been effected.

* * * * *

In Tiddim and Falam the entries in the schedules were all done in pencil, whilst in Haka they were done in ink. In the two former subdivisions attempts were made to have the work done in ink, but this was found to be beyond the capability of the Enumerators, all of whom were Chins or half-breeds. The results were not such as to encourage any further attempts being made, and lead-pencils were resorted to.

In the Haka subdivision the Enumerators were better educated men and able to use pen and ink.

Considering the class of men who had to be employed as Enumerators, it speaks well for the training given them by Messrs. Bateman, Street, and Clarke that the schedules were written up as neatly as they have been.

* * * * *

Emigration and immigration.—There is no general tendency on the part of Chins to move out of the hills. In the Haka subdivision, amongst the Haka, Yokwa and Klang Klangs some 60 people have removed to the plains in the last three months. These people, however, have, without exception, been released slaves, who either fear further slavery or else are unable to obtain fields to cultivate and move down in the hopes of being able to pick up a livelihood in the plains.

In the Falam subdivision there appears to be a tendency on the part of the Yahow and Whenoh tribes to move further north. The movement, so far as at present can be judged, in confined to these two tribes only and is due, I think, to one of two facts, or perhaps to both. Either the population of the tribes is on the increase and in consequence their requirements demand more land, or else their lands are being worked out and fresh fields are required. It will be interesting to note in future years how far this movement will be continued and whether it will spread to other tribes in the Central Hills.

* * * In the *Gazetteer of Upper Burma* compiled by Mr. Scott, C.I.E, the point as to whether the Chin race was at one time more united and civilized than we found it is raised. It is stated in the *Gazetteer* that the Chin laws collected and codified by Maung Tet Pyo would make it appear certain that it was so. In many cases the primitive law of the Chins stamps it as original, but how far these laws would tend to prove the higher degree of civilization of the Chin in years past is a subject which I would not, with the information we have at present, venture to discuss. It is certainly a subject on which more light might be thrown, and further enquires will be made on the point.

* * * * *

In conclusion I would beg to bring the names of the three Assistant Superintendents, Messrs. Bateman, Street, and Clarke, to notice. All three throughout worked with zeal and energy, and the success of the operations is due to their efforts and tactful handing of the various tribes.

Days in succession were spent by all three in hard marching over extremely difficult country, and, in addition, after many a hard day's march, the work of checking a village had to be undertaken. Hundreds of miles were covered by each officer during the operations and the success they achieved shows how well they carried out the work entrusted to them.

Maung San Pu, Maung Lu Din, Maung Ba Pe, Census clerks, Maung Ba Shin, Political clerk, and Maung Ra Tin, Political interpreter, also did good work. They all underwent hard marching and deserve every credit for the way they performed their work under trying circumstances. Mr. Pereira, Head Clerk in my office, also performed very good work in helping to check, sort, and arrange the schedules on arrival in my office.

From W. B. TYDD, Esq., Assistant Superintendent, Pakôkku Chin Hills, to the Superintendent, Census Operations, Burma,—No. 126—19, dated the 25th April 1901.

I have the honur to submit my report on the enumeration of the population of the Pakôkku Chin Hills for the Census of 1901.

The statements attached show

(*a*) Enumeration by villages.

(*b*) Summary for the whole tract.

(*c*) Expeniture incurred.

2. The tract is inhabited by wild Chins, who have no written language, very few can speak Burmese and none possess a literary knowledge of this language. The following expedient was therefore employed to enumerate the people. A triangular piece was cut out of one end of a bit of bamboo and a line was cut across the bamboo marking it off into two equal parts. Each householder was directed to hold a bamboo prepared in this way so that the line faced him and the indented end was upwards. On the right side of the bamboo he had to make a notch above the line for each adult male in his house and below the line for each male child. Similarly he was to make notches for females on the left side.

Thus—

Which reads—

two adult males.

three adult females.

three male children.

two female children.

Selected headmen were sent round to check what each householder had done and to colect the sticks and tie them into bundles by villaegs. I checked the work in several villages in 6 out of the 11 groups into which the tract was divided.

3. On the 1st March the enumeration of only four groups had been reported to me, so that the provisional total of population to be telegraphed on that date had to be estimated. This total was estimated at 12,287. The delay in getting figures from the remaining groups was owing to the absence of myself and several collectors of statistics on a punitive expedition beyond the border. The completed revised enumeration of the whole tract shows the population to be 13,116. I am confident that a fairly accurate Census of this tract has been obtained.

APPENDIX A.

Census by villages.

Name of villages.	Number of houses.	Adults.		Minors.		Total.	Widows.
		Males.	Females.	Males.	Females.		
		I.—Salin Chaung Group.					
1. Long-im-nu	57	61	78	58	63	260	5
2. Pro-im-nu	26	28	35	31	21	115	4
3. Khat-pan-nam	9	10	11	15	7	43	1
4. Chaung	15	25	16	11	17	69	...
5. Khaung-nam Hla	4	3	3	5	...	11	1
6. Hla-im-nu	35	37	42	42	46	167	3
7. Seingnam	22	29	31	27	54	141	2
8. Khaungnam	27	27	31	49	32	139	4
9. M'Khomdwi	7	7	8	20	12	47	1
10. Khāngnam	6	7	7	14	13	41	...
11. Segwi	13	14	14	20	23	71	...
12. Khaunglwe	13	11	20	23	19	73	2
13. Leingnam Khomdwi ...	4	4	4	8	5	21	...
14. Voklu-nam	4	5	4	2	6	17	...
15. Khaung-vern	38	32	39	49	54	174	7
16. Khwako-ktu	19	17	29	26	20	92	5
17. Sakkhrot	13	11	13	27	15	66	2
18. 'Msangnam	8	8	8	14	21	51	...
Total, 18 villages ...	320	336	393	441	428	1,598	37

APPENDIX A—continued.

Name of village.	Number of houses.	Adults.		Minors.		Total.	Widows.
		Males.	Females.	Males.	Females.		
2.—Tilin Group.							
1. M'Shein	13	20	13	16	17	66	...
2. M'Barang	8	8	10	7	10	35	1
3. Immhun	5	7	7	7	3	24	1
4. Teing-kaw	13	11	20	31	15	77	2
5. Taptha	3	5	8	5	...	18	...
6. Sirrpan	6	8	9	8	5	30	1
7. Bukkok	6	9	10	4	3	26	...
8. M'Rukkhai	4	5	7	6	6	24	...
9. Tapnu	12	19	13	12	11	55	...
10. Twikyinko	6	12	10	7	4	33	...
11. Rolong	10	10	10	17	10	47	1
12. Thwipan	4	5	5	5	3	18	...
13. M'Htailong	12	14	15	4	13	46	...
14 Sanglong	10	12	15	12	10	49	...
15. M'Rupso	11	13	15	14	17	59	...
16. Khayo	12	13	13	8	7	41	...
17. Twi-ring	5	7	5	5	5	22	2
18. M'Hte khai	5	13	9	9	9	40	...
19. Imgotha	5	5	9	4	8	26	...
20. Choraw	4	5	4	2	1	12	1
21. Ramlong	9	9	13	9	5	36	...
22. Hkukhtai	4	3	5	2	2	12	3
23. Lunlong	6	7	7	16	8	38	1
24. Choperk	11	13	11	16	8	48	...
25. Monglong	5	4	6	3	11	24	...
26 Simsang	7	7	7	9	8	31	1
27. Rwat	7	8	12	8	9	37	1
28. Tolong	3	1	4	3	6	14	2
29. M'Htaiva	6	6	10	6	2	24	2
30. Hnunbon	6	5	6	10	6	27	1
31. Shwebung	8	13	14	5	5	37	1
32. Kywisang	6	8	5	10	10	33	1
33. Hmawhpi	6	4	6	7	6	23	...
34. Nwat	12	16	24	12	16	68	3
35. Khônkhu	12	16	19	9	14	58	...
36. M'Kreng	4	6	6	5	8	25	1
37. Yetpa	9	13	14	17	9	53	1
38. Shingnu	3	5	2	3	...	10	...
39. M'Kropai	8	7	10	7	9	33	...
40. Na	2	4	4	3	3	14	1
Total, 40 villages	288	356	392	343	302	1,393	28
3.—Paukadu-Pyedaw Group.							
1. Seing-yern	31	31	32	44	41	148	1
2. Bhong-im	14	12	14	12	11	49	2
3. Nayunkokto	5	5	6	7	8	26	...
4. M'Shwi	12	11	14	23	17	65	1
5. M'Tiship	7	7	7	18	20	52	...
6. Mirgakto	8	8	8	18	17	51	...
7. Paunggwan	14	13	14	14	29	70	1
8. Ambung	3	2	3	5	4	14	1
9. M'Khokkhun	3	3	3	5	4	15	...
10. M'Hkok-khun	4	4	5	8	11	28	...
11. Pyinlong	10	8	15	24	29	76	2
12 M'Chellongnam	13	13	15	30	48	106	1
13. Lwedupnam	16	14	22	34	37	107	2
14. Pawdu	8	7	10	12	17	46	1
15. Hpruptwi	3	3	3	6	6	18	...
Total, 15 villages	151	141	171	260	299	871	12
4.—Yaw Chaung Group.							
1. Kwe-lung	30	20	37	36	33	126	12
2 Kha-khen	10	8	13	8	13	42	3
3. M'Giki	11	10	11	10	8	39	1
4. Lok-she	13	11	20	26	20	77	2
5. M'Songban	4	4	4	4	4	16	2

APPENDIX A—continued.

Name of villages.	Number of houses.	Adults.		Minors.		Total.	Widows.
		Males.	Females.	Males.	Females.		
4.—YAW CHAUNG GROUP—concluded.							
6. Suct-mhwe	20	13	20	18	28	79	7
7. Shinnhwoi	18	17	19	16	16	68	2
8. M'Hto	5	4	6	9	6	25	1
9. Imkrai	7	5	7	7	15	34	2
10. Prang	6	4	7	4	6	21	2
11. M'Kringlaw	7	3	6	8	5	22	4
12. Hkaw-kok...	8	4	9	4	11	28	4
13. M'Pein	7	7	5	11	7	30	2
14. Pai-im	10	7	13	6	24	50	5
15. Khung	9	4	5	8	14	31	2
16. M'Tangkaw	8	4	8	12	7	31	4
17. Hpro-it	8	11	9	6	15	41	3
18. Khwi-ging	6	6	7	9	3	25	...
19. Hpruk-khowe	9	5	10	9	10	34	4
20. Geitlong	24	34	39	12	13	98	2
21. Vage	28	28	39	32	30	129	7
22. M'Thu	25	35	38	34	36	143	...
23. Khat	42	58	61	65	51	235	2
24. M'Keng	19	14	19	37	36	106	4
25. Khrumtha	9	6	8	12	5	31	3
26. Vomtho	17	11	22	28	25	86	6
27. M'Hailong	5	3	5	6	8	22	3
28. M'Thwe	4	2	3	7	1	13	3
29. Me Wi	8	4	8	11	8	31	4
30. M'Paidaw	5	7	5	8	3	23	...
31. Lunglai	2	1	2	3	2	8	1
32. M'Pawtha...	3	3	4	4	3	14	...
33. Po	4	3	5	5	9	22	1
34. Kyot-kywe...	5	3	6	2	8	19	2
35. M'Gāng-ging	5	6	11	9	24	50	1
36. Hprung-ging	5	4	4	5	4	17	2
37. Htawkhrum	12	10	10	12	26	58	3
38. Wet-kôk	5	3	6	4	6	19	2
39. Tung-lai	7	8	9	9	7	33	1
40. Khum-Khwe	6	8	9	11	11	39	2
Total, 40 villages ...	436	398	529	527	561	2,015	111
5.—MAUNG CHAUNG GROUP.							
1. Khage	9	9	10	11	13	43	3
2. Bai-a-hpya	4	4	4	3	2	13	1
3. Mankwi	12	13	14	9	14	50	3
4. Teinlong	13	6	13	22	13	54	7
5. Hambôn	18	17	22	20	17	76	4
6 M'Eik-hang	17	11	18	26	15	70	8
7. Hambôn Imgotha	7	5	7	9	5	26	2
8. M'Nambo	11	9	14	19	7	49	2
9. M'Kran-im	8	3	14	7	13	37	5
10. M'Kwi	21	22	9	5	6	42	...
11. Tet Kaw	6	7	13	8	9	37	...
12. Htum-im	5	3	7	4	6	20	2
13. Shet	18	19	24	28	27	98	1
14 Men	15	12	16	21	17	66	3
15. Kwitha	21	17	15	36	35	103	...
16. M'Pawtha...	5	5	7	8	12	32	2
17. Chidup	11	5	14	17	16	52	6
18. Nga-nôn	5	2	5	2	2	11	3
19 Tsekong	6	5	9	23	35	72	...
20. Lilong	10	9	8	14	11	42	5
21. Maka	3	3	3	4	2	12	...
22. Tôktwe	10	8	11	8	9	36	3
23. Whiyaw	8	6	8	8	6	28	2
24. Khonglaw...	13	5	16	17	18	56	9
25. Tsaiyom	9	4	18	10	2	34	5
26. M'Banlong	7	4	7	8	8	27	3
27. M'Wiyaw	7	5	5	8	8	26	...
28. M'Htaw	14	11	13	12	16	52	4
29. Choklong	5	2	5	6	6	19	3
30. Chittha	5	1	5	13	11	30	3

APPENDIX A—continued.

Name of Villages.	Number of houses.	Adults.		Minors.		Total.	Widows.
		Males.	Females.	Males.	Females.		
5—Maung Chaung Group—concluded.							
31. Chickhaw	6	4	6	7	8	25	2
32. Aiman	4	3	4	3	6	16	1
33. M'Bhanba...	9	5	9	8	15	37	4
34. Vokchup	5	4	5	5	6	20	2
35. Wānba	21	15	19	31	46	111	...
36. Tum-im	38	28	33	43	53	157	...
37. M'Khrong...	17	10	17	14	11	52	7
38. Wetkaw	9	6	8	5	8	27	3
39. La Long Hhtwi-im	9	4	10	12	7	33	6
40. Hti-shin	4	2	5	5	2	14	1
41. Twi Kalong	1	1	1	1	1	4	...
42. Imkawtha...	2	3	3	2	4	12	...
43. Twing Kôk	2	2	2	...	1	5	...
44. Ham-im	5	4	3	4	3	14	2
45. M'Hontakoke	7	3	7	11	8	29	4
46. Nga Ha Ge	6	4	6	9	4	23	2
Total, 46 villages ...	448	330	472	546	544	1,892	123
6.—Che Chaung Group.							
1. Twi-im	23	15	22	21	24	82	7
2. Krang-im	12	10	13	16	16	55	2
3. Pe	9	8	9	8	5	30	1
4. Yomtha	16	17	15	5	...	37	8
5. Ti	14	11	16	16	12	55	3
6. Lumpa	10	7	10	10	9	36	3
7. Imgotha	6	5	7	6	5	23	1
8. M'Bingyaw	19	13	24	16	17	70	8
9. Twi-li	10	8	14	12	6	40	2
10. M'Dap	21	16	18	10	7	51	5
11. Lukpe	8	11	16	12	16	55	...
12. M'Kraidaw	24	16	24	27	25	92	8
13. Taw-im	10	8	11	9	8	36	2
14. Shak-am	5	5	4	6	3	18	1
15. Am-long	10	11	17	24	26	78	1
16. Pan-aw	5	3	7	3	3	16	2
17. Mgrikum	8	6	8	14	11	39	3
18. Tai-bong	8	4	8	6	9	27	4
19. M Shu-yaw	7	5	7	4	5	21	2
20. Hti-num	5	3	5	7	7	22	2
21. Khomthern	5	6	9	9	8	32	...
22. Shim	20	16	20	13	10	59	4
23. Vom	5	5	3	8	10	26	...
24. Pwi-im	6	6	6	6	7	25	...
25. Thun-twi	6	6	6	6	3	21	...
26. Shikhruit	6	4	6	3	8	21	2
27. M'Leng	6	5	11	3	3	22	1
28. M'Shin-im...	12	7	12	9	12	40	6
29. Hkliyaw	6	4	6	9	14	33	2
30. Htet-ban	11	11	13	19	15	58	...
31. Htwi-im	7	5	6	1	2	14	2
32. Hpwi-im	31	29	41	35	36	141	10
33. Hkrôt-im	29	18	30	35	34	117	11
34. Khom-im	43	43	53	23	34	153	8
35. Hilong	42	31	43	36	27	137	11
36. Leng	8	6	9	8	4	27	2
37. Tangbeng	8	6	8	6	5	25	2
38. Imbern	5	3	7	11	7	28	2
39. Chaung	5	4	5	6	10	25	1
Total, 39 villages. ...	491	397	549	478	463	1,887	129
7.—Te Chaung Group.							
1. Pangbai	11	10	15	29	21	75	1
2. Kyinyum	11	8	10	26	26	70	3
3. Twi-rung	9	8	11	17	15	51	1
4. Oi-ge	5	4	5	12	6	27	1
5. Lukpe	5	5	3	18	17	43	...

APPENDIX A—continued.

Name of villages.	Number of houses	Adults.		Minors.		Total.	Widows.
		Males.	Females.	Males.	Females.		
7.—Te Chaung Group—concluded.							
6. Shanutlong	4	2	4	8	3	17	2
7. Khwelung	4	3	3	7	9	22	1
8. Immhun	3	3	4	6	7	20	...
9. Bawn-im	3	3	2	4	5	14	...
10. M'Htailong	2	1	3	5	3	12	1
11. M'Eik Khrang	5	5	7	6	1	19	1
12 Imgotha	5	3	4	7	7	21	2
13. Kha Long	2	2	2	2	6	12	...
14. Te-long	10	8	9	15	17	49	3
15. Twibalan	2	2	2	2	5	11	...
Total, 15 villages ...	81	67	84	164	148	463	16
8.—Khadin Chaung Group.							
1. Kanlong	7	5	7	8	17	37	2
2. Seingnam	9	4	9	12	14	39	5
3. Khaungnam	6	4	8	8	7	27	2
4. Sawlongnam	11	9	10	16	15	50	3
Total, 4 villages ...	33	22	34	44	53	153	12
9.—Kyauksit Chaung Group.							
1. M'Blendo-atet	14	14	18	26	18	76	...
2. M'Blendo-auk	5	6	6	5	8	25	1
3. M'Hmawkun	14	12	12	15	8	47	2
4. Thwido	7	12	11	11	9	43	...
5. Shang	15	11	21	23	18	73	5
6. Samtha	12	9	14	17	14	54	4
7. Ambôn	11	7	11	19	9	46	4
8. Swi-tu-nam	6	7	8	5	9	29	...
9. Vumlong	7	3	8	7	8	26	4
10. M'Thai-tha	10	11	12	14	12	49	...
11. Htam Om	10	11	14	16	16	57	...
12. Loktet-htezon	4	4	4	4	8	20	...
13. M'Krai	10	10	12	17	20	59	...
14. Lungshrang	12	12	16	16	21	65	1
15. Khaban	11	11	14	17	20	62	...
16. Hingubon	6	6	6	6	7	25	...
17. M'Shi-twi	3	2	3	3	6	14	1
18. Mwe-twi	2	2	2	...	...	4	...
Total, 18 villages ...	159	150	192	221	211	774	22
10.—Môn Chaung Group.							
1. Kyatwi	28	46	39	19	27	131	4
2. Kyaing-zaung	15	27	21	20	4	72	1
3. Ampü Kunzaw	19	36	37	17	18	108	...
4. Yaung-twi	14	21	21	6	19	67	...
5. Purzaw	13	13	15	6	6	40	2
6. Adaungyan	16	23	26	13	7	69	1
7. M'Pam-nam	5	6	10	6	5	27	1
8. Kherng-tu	10	14	14	9	8	45	...
9. Saungza	11	12	11	6	5	34	...
10. Laikperntu	14	18	18	11	3	50	...
11. M'Hmaung-nam	14	19	22	22	12	75	1
12. Namlaung	18	33	27	23	18	101	...
13. Yanzônnam	8	11	11	11	7	40	..
14. Khaw-byi-hpum	10	16	16	7	10	49	1
15. Loho-hpum	13	15	15	10	16	56	1
16. M'Zuzum	6	9	6	5	5	25	1
17. Tsar-long-nam	8	10	11	5	11	37	...
Total, 17 villages ...	222	329	320	196	181	1,026	13

APPENDIX A—concluded.

Name of villages.	Number of houses.	Adults.		Minors.		Total.	Widows.
		Males.	Females.	Males.	Females.		
				II.—KYI CHAUNG GROUP.			
1. Tukhtu	6	7	9	10	5	31	...
2. M'Hnawlong	5	5	5	6	11	27	1
3. M'Hainu	9	5	9	17	17	48	4
4. Zakkok	8	6	9	18	11	44	2
5. M'Berng-twi	5	5	6	8	10	29	...
6. M'Thung-nu	6	6	7	16	10	39	1
7. Khwelung	5	5	6	7	5	23	...
8. Sirrhpun	6	5	7	8	5	25	1
9. Natgyigya	4	4	6	10	5	25	...
10. M'Hnawlong	6	5	8	8	19	40	1
11. Dandi	6	6	7	11	9	33	...
12. Aukdandilong	3	3	2	2	4	11	...
Total, 12 villages ...	69	62	81	121	111	375	10

APPENDIX B.

Summary of Pakôkku Chin Hills.

Name of group.	Number of villages.	Number of houses.	Adults.		Minors.		Total.	Widows.
			Males.	Females.	Males.	Females.		
				(*a*) CHÌNS.				
1. Salin Chaung ...	18	320	336	393	441	428	1,598	37
2. Tilin	40	288	356	392	343	302	1,393	28
3. Paukadu Pyèdaw ...	15	151	141	171	260	299	871	12
4. Yaw Chaung ...	40	436	398	529	527	561	2,015	111
5. Maung Chaung ...	46	448	330	472	546	544	1,892	123
6. Che Chaung ...	39	491	397	549	478	463	1,887	129
7. Te Chaung ...	15	81	67	84	164	148	463	16
8. Kadin Chaung ...	4	33	22	34	44	53	153	12
9. Kyauksit Chaung ...	18	159	150	192	221	211	774	22
10. Môn Chaung ...	17	222	329	320	196	181	1,026	13
11. Kyi Chaung ...	12	69	62	81	121	111	375	10
Total ...	264	2,698	2,588	3,217	3,341	3,301	12,447	513
				(*b*) TEMPORARY RESIDENTS.				
12. On punitive column ...	...	...	450	*Nil.*	*Nil.*	*Nil.*	450	*Nil.*
13. Garrison of Mindat—								
(*a*) Chin Police ...	...	17	17	22	14	8	61	*Nil.*
(*b*) Military Police ...	...	17	130	15	9	4	158	*Nil.*
Total ...	...	34	597	37	23	12	669	...
GRAND TOTAL ...	264	2,732	3,185	3,254	3,364	3,313	13,116	522

APPENDIX C.

Expenditure.

Villages.	Number.	Rate paid to Supervisors.	Amount.
		Rs. A. P.	Rs. A. P.
10 houses and under	177	0 8 0	88 8 0
11 houses to 20 houses	63	1 0 0	63 0 0
21 houses to 30 houses	15	1 8 0	22 8 0
31 houses to 40 houses	5	2 0 0	10 0 0
Over 40 houses	4	2 8 0	10 0 0
Total ...	264	.....	194 0 0

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